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ABSTRACT

Several tests available from the Educational Testing Service (Princeton, New Jersey) have been used or are candidates for use by the Tennessee State Department of Education as initial public school personnel licensure endorsement area tests. The first of the two reports contained in this document (i.e., the Executive Report) describes a study of one of these tests, namely, the test of Educational Leadership. The study's purpose was threefold: (1) to determine the test's validity as a measure of knowledge, academic skills, and abilities required for specific initial licensure of principals in Tennessee; (2) to recommend a minimum qualifying score for applicants who would take the test if it was declared valid for use in Tennessee; and (3) to ascertain the relationships between the 145 test items and a group of 15 competencies required of principals working in Tennessee. A panel of 13 teacher education institutional personnel reviewed test content; 20 local school district staff members assessed test item job relevance; and a separate committee of nine educational and lay representatives reviewed responses to make a decision on test validity and a recommendation of a minimum qualifying score. The test was judged valid for use in principal certification, with a specific minimum qualifying score of 500. Three appendixes list committee members, summarize validity data, and list the recommendations per test item. Following this report, the Technical Report presents the rationale for the following study parameters: (1) research design and procedures; (2) functions of the evaluating panel of 33 educators; (3) functions of the 9-member Standards Committee; (4) organization of the panels; (5) formation of the panels; (6) preparation for panel meetings; (7) data collection; (8) selection and meeting of the Standards Committee; and (9) data on panel responses. A concern of professional educators is to conduct similar periodic reviews of all tests required for licensure in Tennessee to ensure that recently created and revised tests are analyzed for job relevance. Six tables present data from the study. Eight appendixes describe the test's content and provide instructions for, overviews of, and materials concerning tasks to be performed by members of the Content Review Panel, the Job Relevance Panel, the Knowledge Estimation Panel, and the Standards Committee. (SLD)

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ED355243

VALIDATION STUDY AND RECOMMENDATION OF A PERFORMANCE STANDARD FOR THE EDUCATIONAL LEADERSHIP TEST FOR PRINCIPAL LICENSURE IN TENNESSEE

Submitted to
Tennessee State Department of Education
Cordell Hull Building
Nashville, Tennessee 37243

Prepared by
Bureau of Educational Research Service
College of Education
Memphis State University
Memphis, Tennessee 38152

Executive Report: October 30, 1992
Technical Report: December 31, 1992

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EXECUTIVE REPORT ON VALIDATION STUDY AND RECOMMENDATION OF A PERFORMANCE STANDARD FOR THE EDUCATIONAL LEADERSHIP TEST FOR PRINCIPAL LICENSURE IN TENNESSEE

Submitted to

Tennessee Department of Education
Cordell Hull Building
Nashville, Tennessee 37243

Prepared by

John R. Petry, Principal Investigator
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October 30, 1992

Acknowledgements

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The 9 members of the Standards Committee performed crucial tasks in reviewing the data collected to make recommendations on test performance standards. Under the able leadership of Tom George, the committee functioned in a highly professional and efficient manner.

Personnel from Educational Testing Service were very helpful and responsive in providing support for the study. Personnel in the Atlanta office handled the arrangements for supplying the test materials and support services required to complete the study. Special recognition is extended to Roy Hardy, Director of the Atlanta office, Tom Snider-Lotz, and J. T. Stewart for their participation in the data collection activities.

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Introduction

Statutory requirements for initial licensure/certification and endorsement of public school personnel in Tennessee were established by the Comprehensive Education Reform Act of 1984. The legislation mandated that applicants for initial certification must present minimum qualifying scores on secured tests of communication skills, general knowledge, professional knowledge, and endorsement area specializations. The act stipulated that the requirements would become effective July 1, 1984, or as soon thereafter as the tests could be validated and have minimum qualifying scores established.

A statewide study, conducted in 1984, determined that the three National Teacher Examinations (NTE) Core Battery tests and 23 of the 25 NTE Specialty Area Tests were valid to use as initial certification tests in Tennessee. The study also provided the data to establish minimum qualifying scores for the valid tests. Upon completion of the study, the Tennessee State Board of Education (TSBE) immediately established minimum score requirements for the NTE Core Battery covering communication skills, general knowledge, and professional knowledge. Subsequently, the TSBE instituted minimum score requirements as recommended for NTE Specialty Area tests that correspond to 14 endorsement areas.

Several tests available from Educational Testing Service (ETS), Princeton, NJ, have been used or are candidates for use by the Tennessee State Department of Education (TSDE) as initial licensure endorsement area tests. The TSDE obtained the services of Memphis State University to conduct a study of the Educational Leadership test during the summer of 1992 to determine its validity, to recommend a minimum qualifying score for applicants who would take the test for licensure as a principal, and to establish relationships between test items and competencies required of principals. The statewide study involved personnel from public education agencies and higher education institutions with professional preparation programs in these specialized areas.

Objectives of the Study

This study had three objectives: (1) to determine the validity of the Educational Leadership test as a measure of the knowledge, academic skills, and abilities required for specific initial

licensure of principals in Tennessee and the knowledge estimation of the same test, (2) to formulate a recommendation on a minimum qualifying score for the test, if it was declared to be valid for use in Tennessee, and (3) to ascertain the relationships between the 145 items on the test and a group of 15 competencies deemed necessary for principals who will work in Tennessee. The study was delimited to potential use of the tests for initial licensure rather than to select personnel for employment.

Description of the Test

The test included in the study is an instrument administered by Educational Testing Service, a private, non-profit testing organization: Educational Leadership.

Strategy

The methodology employed in the study involved a panel consisting of teacher education institutional personnel in the review of test content, local school district professional staff in the assessment of test item job relevance, and both types of personnel in the estimation of knowledge levels by test item among minimally qualified applicants for the licensure area. The content review, job relevance review, and the knowledge estimation function were applied to the test. A separate committee was named to review the data analyses of the responses from the panel in order to make a decision on test validity and a recommendation on a minimum qualifying score for the test, if declared to be valid, as well as to compare all items on the test with the 15 competencies for principals.

Participant Nomination and Selection

The nomination of some of the potential panel members was solicited by letter. Nominations were requested from the chief academic administrators of the teacher education units in Tennessee with approved preparation programs for the applicable specializations. Principals attending the Tennessee Academy for School Leaders (TASL) were enlisted as participants.

Nominees had requisite expert qualifications, represented both gender groups, included relevant racial groups, and represented either institutions offering specialized preparation programs in Tennessee or school districts. A total of 33 personnel from higher education institutions (13) and local school districts (20) participated in the study.

Panel Functions

A current form of the ETS test was supplied by Educational Testing Service for review by the panel members selected for the test. The panel members worked independently in conducting the review based on instructions given by ETS personnel, who supervised the data collection sessions. One-day meetings to collect the data were held in Knoxville and Nashville during July, 1992.

Each content review panel member, who represented a higher education institution in Tennessee, performed three tasks. First, the panelist examined each item on the assigned test to judge whether or not at least 90% of the students completing the appropriate preparation program would have the opportunity to acquire the knowledge or academic skills to choose the correct response for the item. Second, the panelist made judgments about the congruence between the proportion of the test devoted to each topic and the emphasis on the topic in the curriculum required for professional preparation. Third, the panelist indicated the degree to which the test as a whole was congruent with the total professional preparation program.

Each job relevance review panel member, who was from a local school district, reviewed each test item on the assigned test to make judgments about the relevance of the knowledge or academic skills to competent performance as a beginning specialized practitioner in Tennessee. The relevance of each item was judged as "Critical," "Important," "Acceptable," "Questionable," or "Not Relevant."

The knowledge estimation panel members included the individuals who also performed the content review and job relevance assessments for the Educational Leadership test. At the test item level, each panelist made judgments about the difficulty of each item for persons who have minimum levels of knowledge and academic skills necessary for competent performance as a beginning principal in Tennessee.

All panel members made decisions about whether or not each test item related to one or more of the 15 competencies for which principals would be held accountable in Tennesee. A panelist could agree with a choice already made by an ETS respondent, disagree with the choice of the ETS respondent, or indicate the relationship to additional competencies by filling in a columnar bubble.

Standards Committee

A group of 9 educational and lay representatives was selected to serve as the Standards Committee for the study. The committee met in Nashville on September 17, 1992, to perform three tasks. First, the committee reviewed the data on appropriateness (content review and job relevance review) for the Educational Leadership test to make a decision about its validity for consideration for use in Tennessee. Secondly, the committee developed a recommendation of a minimum qualifying score for the valid ETS test based on a review of the knowledge estimation data and examinee performance data. Thirdly, the committee examined the results of the panelists' choices of the relationships of all items on the test to required competencies.

Presentation of Data

Two types of information are summarized in this section of the report. They are demographic data on panel participants and the Standards Committee and results of the panel functions (content review, job relevance review, knowledge estimation, and competency review).

Demographic Data

The personnel who performed the three panel functions were described by gender and racial background. The three panel groups were distributed on these variables as follows:

	Content Review (N=13)	Job Relevance Review (N=20)	Knowledge Estimation (N=33)
Gender			
Male	92.3%	60%	72.7%
Female	7.7%	40%	27.3%
No Response	0.0%	0%	0%
Racial Group			
Black	7.7%	20%	15.1%
White	92.3%	80%	84.9%
No Response	0.0%	0%	0.0%

The 9-member Standards Committee was a broadly representative group of educators and lay personnel from Tennessee. (See Appendix A for a list of committee members.) The committee was described on the variables of gender and racial background as follows:

Gender	Male	55.5%
	Female	44.5%
Racial Group	Black	33.3%
	White	67.3%

Content Review

The content review of the ETS tests was performed at three levels: test item, test topic, and total test. Appendix B presents the results of the item review for the Educational Leadership test. The data indicated that over 50% of the panelists who reviewed the test reported at least 95% of the items for the test as content appropriate. Based on the criterion of more than 70% of the panelists, the percentages of test questions judged content appropriate was 88%. A minimum of 81% of the questions on the test were perceived as content appropriate by over 80% of the panel members.

Appendix B also contains a derived index for the test that represents the degree of difference between the topical emphases of the test and the specialized preparatory curriculum. The index ranges from 0 (close similarity) to 100 (little similarity); the index value for the Educational Leadership test was 13.6.

The data summarized in Appendix B represent the comparison of the total test and the overall related professional preparatory curriculum. The percentages of panelists who indicated close parallel or some difference for the Educational Leadership test were relatively high, or 61.5%.

Job Relevance Review

Appendix B also presents the results of the job relevance ratings of test items for the Educational Leadership ETS test by local school district personnel. Responses of "Critical," "Important," or "Acceptable" were defined as indicating relevance for items in this analysis. Over 50% of the panelists who reviewed the test indicated that at least 97% of the items were relevant to competent performance as a beginning specialized practitioner in Tennessee. Over 70% of the panelists for the test judged about 85% or more of the items as being job relevant.

Knowledge Estimation

The responses of panel members in performing the knowledge estimation function for the test were analyzed to derive estimated raw score means for minimally qualified certification applicants. Using conversion factors provided by ETS, the scaled score equivalent of the raw score mean was computed for the test because there were enough data to establish a mean, standard deviation, and standard error of measurement. Results are depicted in Table 1.

Table 1

SUMMARY OF THE ANALYSIS ON AN ESTIMATED SCORE FOR THE EDUCATIONAL LEADERSHIP TEST FOR MINIMALLY QUALIFIED LICENSURE CANDIDATES

	Items	Mean		
Test Name	Total/Scored	Raw Score	Scaled Score	N
Educational Leadership	145/143	67.837	528.647	33

The scaled scores for a ETS subject-matter test can vary from a low of 250 to a high of 990, a 740-point difference between the lowest and highest scores possible. Scores cannot be compared directly with another subject-matter test for two reasons: first, the tests are normed independently on different groups of examinees; second, the standard error of measurement, an index of the precision of test scores, varies to a considerable degree between tests.

Educational Leadership Test

The analysis of the relationship of test items to principals' competencies conducted by 30 participants is depicted in Appendix C. Data show the number of ETS choices by item and disagreements with them, and number of additional competencies recommended by item. Some items have no recommendations, whereas the participants indicate that an item (such as 10) could be related to nine more competencies than indicated by ETS staff members. Furthermore, as many as

25 panelists indicated the addition of one competency (legal knowledge) to the ones indicated by ETS personnel for item 105.

Standards Committee Actions

In order to act formally as a committee, the Standards Committee elected a member to serve as chair during its deliberations. The decisions on test validity and recommendations on minimum qualifying scores and related matters are reported below.

Test Validity Decision

The Standards Committee was presented all data collected and analyzed in performing the content review and job relevance review functions. (Knowledge estimation data were not released to the committee until the test validity decision had been made.) The committee considered concurrently the content review results (test item, test topic, and total test levels) and job relevance review results for the Educational Leadership test independently in making decisions on test validity. Utilizing this approach, the committee recommended that the Educational Leadership test, for which a decision was required, was valid to use in Tennessee as an initial certification test.

Recommended Minimum Qualifying Score

The Standards Committee received the results of the knowledge estimation function for minimally qualified professional practitioners based on the judgments of the panel members who reviewed the Educational Leadership test. The data reported for the test were the following: number of examinees, scaled score mean, standard deviation, standard error of measurement, and knowledge estimation scaled score mean. In addition, the values for scaled score means minus 1, 2, 3, and 4 standard errors of measurement were derived (Table 2).

After a thorough review of the examinee performance data, the committee recommended a specific minimum qualifying score of 500 for the Educational Leadership test. The committee further recommended that the score be reviewed in two years in order that Tennessee data be considered.

Table 2

NORMATIVE AND DERIVED DATA ON THE NTE SPECIALTY AREA TEST ON EDUCATIONAL LEADERSHIP

Term	Data
Items	
Total/Scored	145/143
Norms	
N	715
Mean	619
S.D.	102
S.E.M.	29
Knowledge Estimation	
Mean	529
Mean -	
1 S.E.M.	500
2 S.E.M.	471
3 S.E.M.	442
4 S.E.M.	413

Actions Concerning the Relationship of Test Items to Competencies

After examining the data presented them, the committee concluded that there appeared to be some relationship between the items on the Educational Leadership test and the competencies deemed necessary for principal licensure in Tennessee. There were concerns expressed about items that had few references to competencies.

APPENDIX A

MEMBERS OF THE STANDARDS COMMITTEE, TEST VALIDATION STUDY

Joe Cornelius, Associate Professor of Educational Administration, Tennessee State University, Nashville

Pat Gammon, Mid-Cumberland Region Director, Tennessee PTA, Hendersonville

Tom George, Professor and Associate Dean, College of Education, University of Tennessee, Knoxville

Beverly Hearne, French Teacher, Central-Merry High School, Jackson-Madison County Schools, Jackson

Charles Jenkins, President-Elect, School Board Association, Pulaski

B. J. Naylor, Vice-President for Academic Affairs, Freed-Hardeman University, Henderson

Relzie Payton, Instructional Supervisor-Middle Schools, Shelby County Schools, Memphis

Dan Russell, Director of Human Resources, Johnson City Schools, Johnson City

Bettye Triplett, Consultant, Special Projects, Metro Public Schools, Nashville

APPENDIX B

SUMMARY OF VALIDITY DATA FOR TEST ON EDUCATIONAL LEADERSHIP

Content - Items*	Percentage of college personnel who rated item content as appropriate for curriculum					
	over 50%	over 60%	over 70%	over 80%	over 90%	N
Percentage of items	95	92	88	81	52	13

Content - Topics	Difference in relative emphasis of curriculum and test topics	N
Index	13.6	13

Content - Total test	Percentage of college personnel choosing each response option as appropriate for curriculum**				
	Close parallel	Some differences	Appreciable differences	Little similarity	N
Percentage of items	0	61.5	30.8	7.7	13

Job relevance - Items*	Percentage of public school personnel who rated item content as relevant to job					
	over 50%	over 60%	over 70%	over 80%	over 90%	N
Percentage of items	97	92	85	74	46	20

*Number of items = 145
**Percentages may not equal 100% for a test due to omissions.

APPENDIX C

NUMBER OF ETS CHOICES, DIAGREEMENTS WITH ETS CHOICES, ADDITIONAL COMPETENCIES RECOMMENDED BY ITEM, AND MAXIMUM RECOMMENDATIONS OF A COMPETENCY

Item	Number of ETS Choices	Disagreement with ETS Choices	Additional Competencies Recommended	Maximum Recommendations of a Competency (at least 7)
1 not scored	0	0	0	
2	2	2	4	
3	1	0	7	
4	3	1	5	
5	1	1	6	
6	1	0	3	7
7	1	1	6	
8	1	0	3	
9	4	3	3	
10	1	1	9	
11	1	1	4	
12	2	0	4	
13	4	2	1	
14	1	0	6	
15	3	1	4	7
16	2	0	4	
17	2	2	5	
18	5	2	3	
19	2	0	8	
20	2	0	2	
21	3	2	2	
22	1	0	3	
23	1	0	5	
24	2	0	1	
25	1	0	5	
26	5	2	1	
27	2	1	5	
28	1	0	3	
29	1	1	5	
30	3	2	4	
31	4	2	0	
32	1	1	8	
33	5	3	5	
34	2	2	4	
35	1	0	3	8
36	4	1	4	
37	1	0	4	
38	3	3	4	
39	3	2	4	
40	3	1	8	
41	1	1	7	
42	2	0	4	

43	1	1	3	
44	1	1	6	
45	3	2	4	
46	1	1	5	
47	3	2	2	
48	2	1	2	
49	3	1	2	
50	2	0	2	
51	2	2	1	
52	2	1	7	
53	3	1	5	
54	2	0	6	
55	1	0	7	7
56	1	1	6	7
57	2	0	4	
58	1	0	4	
59	1	0	2	
60	2	1	4	14
61	1	0	3	
62 not scored	0	0	0	
63	2	1	6	
64	2	0	1	
65	2	1	0	
66	1	0	1	9
67	1	0	2	
68	4	2	2	
69	2	0	0	
70	1	0	4	
71	5	3	4	
72	1	1	7	
73	4	2	5	
74	1	0	2	
75	1	0	6	
76	1	0	3	
77	2	1	3	
78	3	0	4	
79	1	0	3	
80	2	1	1	
81	1	1	6	9
82	1	0	0	
83	1	0	5	
84	6	1	6	
85	2	0	6	
86	2	0	2	9
87	2	0	2	
88	5	2	1	
89	1	1	7	
90	1	1	3	
91	2	1	3	
92	4	1	4	
93	4	0	1	
94	1	1	3	9
95	3	0	4	
96	3	2	1	
97	3	1	5	

98	2	2	5	
99	3	0	4	
100	2	1	2	
101	1	0	7	
102	1	0	4	13
103	1	0	4	
104	1	0	6	
105	0	0	5	7, 25
106	5	2	2	
107	3	0	3	
108	2	0	1	
109	2	1	4	8
110	1	1	6	
111	1	1	4	
112	1	1	4	
113	1	1	2	
114	1	0	4	
115	1	0	2	
116	2	1	4	
117	1	0	6	
118	1	0	2	
119	2	1	4	
120	2	0	2	7
121	2	2	1	
122	1	1	3	
123	1	1	3	
124	1	1	4	
125	1	0	4	
126	1	0	2	
127	1	0	2	
128	1	1	4	
129	2	0	2	
130	3	2	2	
131	1	1	5	8
132	2	1	2	
133	1	1	2	
134	2	1	4	
135	2	1	2	
136	1	1	3	
137	2	1	4	8
138	2	0	5	
139	1	0	2	7
140	1	1	5	
141	2	2	3	
142	1	0	3	
143	1	1	2	
144	1	1	3	
145	1	1	3	8

TECHNICAL REPORT ON THE VALIDATION STUDY AND RECOMMENDATION OF A PERFORMANCE STANDARD FOR THE EDUCATIONAL LEADERSHIP TEST FOR PRINCIPAL LICENSURE IN TENNESSEE

Submitted to

Tennessee State Department of Education
Cordell Hull Building
Nashville, Tennessee 37243

Prepared by

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Introduction

Statutory requirements for the use of tests in the initial licensure/certification and endorsement of public school personnel in Tennessee were established by the Comprehensive Education Reform Act of 1984. The legislation mandated that applicants for initial certification must present minimum qualifying scores on secured tests of communication skills, general knowledge, professional knowledge, and endorsement area specializations. The act stipulated that the requirements would become effective July 1, 1984, or as soon thereafter as the tests could be validated and have minimum qualifying scores established.

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The Educational Leadership test available from Educational Testing Service (ETS), Princeton, New Jersey, has been used by the Tennessee State Department of Education (TSDE) as an initial licensure test. The Department obtained the services of Memphis State University to conduct a study of the test during the summer of 1992 to determine its validity, to recommend a minimum qualifying score for applicants who would take the test for licensure as a principal, and to establish relationships between test items and competencies required of principals.

Objectives of the Study

The study conducted for the Tennessee State Department of Education by Memphis State University had three objectives. They were: (1) to determine the validity of the Educational Leadership test as a measure of the knowledge, academic skills, and abilities required for a specific licensure of public school personnel in Tennessee, (2) to formulate a recommendation on

a minimum qualifying score for the test if it is declared valid for use in Tennessee, and (3) to establish relationships between test items and competencies required of principals. The study was delimited to potential use of the test for initial licensure rather than to select personnel for employment.

Description of the Test

The Educational Leadership test included in data collection in 1992 was constructed by Educational Testing Service, which is a private, non-profit testing organization. A content description of the test is presented in Appendix A.

Methodology

The design and procedures used in the study represent essentially a replication of comparable studies of ETS/NTE tests conducted by ETS (Faggen, 1983) and Memphis State University (Bowman, Bowyer, Petry, Rakow, Nothern, & Jacobs, 1984; Bowman, Petry, Emanuel, & Bellott, 1988; Bowman, Petry, Rakow, Douzenis, & Emanuel, 1989; Bowman, Petry, Rakow, & Emanuel, 1990; Bowman, Petry, Rakow, & Emanuel, 1991; and Bowman, Petry, Rakow, & Watt, 1992). This section of the report presents the rationale for the design and procedures, the panel functions, the Standards Committee functions, organization of the panels, formation of the panels, preparation for panel meetings, the data collection, selection and meeting of the Standards Committee, and the data on panel responses.

Rationale for the Methodology

The literature on standard-setting for licensure examinations does not demonstrate a singular appropriate or clearly superior methodology. The use of professional judgment under relatively controlled conditions as employed in this study complies with accepted measurement principles and has been widely utilized in similar studies. The procedures used in making judgments deal with standard setting (judgments about levels of test performance necessary for persons who are minimally qualified in specialized areas). Consequently, the methods used in the study required (1) a review of the test content to determine congruence with professional

preparation programs, (2) a review of the test content for relevance to the job performed by initially licensed professional personnel, and (3) the estimation of the minimum qualifying score for licensure.

The comparison of the ETS test with the professional preparation programs on a statewide basis required an evaluation of the specific questions and an assessment of the sections or topics within the test. The determination of job relevance of the test entailed an evaluation of each question on the test. The estimation of performance levels expected of minimally qualified applicants for licensure necessitated a broad-based familiarity with the responsibilities of professional public education personnel in Tennessee. These requirements were addressed by systematically collecting and analyzing the judgments of representative groups of professional educators with appropriate experiences in local school districts and higher education institutions. (The nomination and selection procedures for participants are described below.)

The study participants were assigned specific functions to be performed: content review, job relevance review, and knowledge estimation. Personnel who were knowledgeable with respect to preparation of professional public school specialists in the specialized area conducted the content review. Practitioners in the specialized area performed the job relevance review. Both types of personnel participated in the knowledge estimation activities. An independent committee utilized the results from the test review and knowledge estimation to make a decision on test validity and a recommendation on a minimum qualifying score.

Human judgment by professional educators was unquestionably the foundation of the study. While judgments by professionals are an integral part of all research, such judgments were used to generate the raw data that were analyzed statistically in this study. This strategy for data collection was necessary to provide information needed by the Tennessee State Department of Education to determine the minimum qualifying score of the test in the initial certification and endorsement process. The alternative strategies available and described in the literature were inadequate because they do not encompass all functions required for standard setting.

The validation aspect of the study complies with the professional guidelines promulgated in Standards for Educational and Psychological Tests (American Psychological Association, 1974). The standards for content validation are the following:

> Evidence of content validity is required when the test user wishes to estimate how an individual performs in the universe of situations the test is intended to represent . . . . To demonstrate the content validity of a set of test scores, one must show that the behaviors demonstrated in testing constitute a representative sample of behaviors to be exhibited in a desired performance domain. (p. 28)

Consequently, the content review by higher education faculty members focused on the congruence between the content domains of the test and the related domains of the professional preparation programs in Tennessee.

The "General Standards for Validity Studies" in the Uniform Guidelines on Employee Selection Procedures (Equal Employment Opportunity Commission, 1978) states that:

> Evidence of the validity of a test or other selection procedure through a construct validity study should consist of data showing that the procedure measures the degree to which candidates have identifiable characteristics which have been determined to be important in successful performance in the job for which the candidates are to be evaluated. (p. 38298)

Therefore, job relevance of the test was included as an additional dimension of the validity assessment of the tests. Personnel from local school districts reviewed the test to provide information on the relevance of the test to the responsibilities of licensed principals in schools in Tennessee.

In establishing minimum score requirements, the Standards for Educational and Psychological Tests states, "If specific cutting scores are to be used as a basis for decisions, a test user should have a rationale, justification, or explanation of the cutting score adopted" (APA, p. 66). The rationale for the recommendation on a minimum qualifying score derived in this study is that the score must be based on the collective judgments of representative experts. The personnel

who performed the knowledge estimation function were qualified experts from local school districts and professional preparatory higher education institutions throughout Tennessee. Their combined judgments constituted the basis for determining the minimum score on knowledge and academic skills required for initial licensure of professional public education personnel in Tennessee.

The strategy used in the study required that the judgments of individuals from local school districts and professional preparatory higher education institutions would be combined on a statewide basis to determine the estimated performance level of minimally qualified personnel for the test. As a consequence, two factors may produce differential effects for the graduates of different institutions: (1) the use of data for the state as a whole and (2) the use of an approved program procedure to offer specialized preparation programs at specific higher education institutions. Variability in the course content and grading practices are likely across institutions offering approved programs in the same specialization. Therefore, graduates of different institutions may be unequally affected by statewide standards.

Panel Functions

The functions performed in the review of the test were conceptualized as panel activities. Separate panels were utilized to perform content review, job relevance, and knowledge estimation functions for the Educational Leadership test. Panelists were asked to relate test items (145) to 15 competencies identified by a task force as essential for all principals in Tennessee schools. The activities of the panels are described below.

Content Review Panel. The members of the Content Review Panel for the Educational Leadership test independently performed three tasks in reviewing test content. (Instructions for the tasks are presented in Appendix B - Instructions and Overview of Tasks to be Performed by Members of the Content Review Panel.) These tasks involved a review of the test at three levels: question, topic, and total test. Standardized oral instructions were given at the meeting to assure use of the appropriate reference group in performing the tasks.

First, the panelist examined each test question on the assigned test to judge whether or not 90% of the students completing the related preparation program would have had the opportunity to acquire the knowledge or academic skills needed to answer the question correctly. Instructions were given to base judgments on experience with students and knowledge of the program at the panelist's institution. Using test questions with the correct answers noted, the panelist in effect classified each question as either "Yes," "Probably Yes," "Probably No," or "No" using the 90% criterion.

Second, the panelist made judgments about the congruence between the proportion of the test devoted to each topic and the emphasis on the topic in the curriculum required for professional preparation. A description of the test content was given to the panel member that listed the major topics and the approximate percentages of the test questions related to each topic. The comparison of the topical emphases was made by indicating whether the emphasis given to each topic in the preparation program was the same as, greater than, or less than the emphasis given to the topic on the test. The terms "Greater Than" and "Less Than" were defined as perceived differences of 5% or between the preparation program and the test.

Third, the panelist made a judgment about the similarity between the total test content and the composition of the curriculum for the professional preparation program. The comparability as perceived by the panelist was expressed by choosing from four response options: "Close Parallel," "Some Differences, "Appreciable Differences," and "Little Similarity." These judgments provided an indication of the congruence between the total test content and the professional preparation of specialists.

The order of task performance was deliberately sequenced as described above. Because the questions were grouped into content categories, the panelists should be better prepared to compare test content and curriculum content after reviewing the test questions. Therefore, the tasks were performed in sequence at the question, topic, and total test levels.

Job Relevance Panel. The members of the Job Relevance Panel for the Educational Leadership test reviewed each question on the appropriate test to make judgments about the degree

to which the knowledge or academic skills related to competent performance as a licensed principal of a school in Tennessee. (See Appendix C - Instructions and Overview of Tasks to be Performed by Members of the Job Relevance Panel.) Standardized instructions were given at the meeting to assure use of the appropriate reference group in making judgments. The relevance of each test question was judged as "Critical," "Important," "Acceptable," "Questionable," or "Not Relevant." Each panel member made independent judgments on the relevancy of the test questions on the assigned test.

Knowledge Estimation Panel. The members of the Knowledge Estimation Panel for each test performed a single task in making judgments about performance levels of minimally qualified personnel who are to serve as licensed principals public educators in Tennessee schools. (See Appendix D - Instructions and Overview of Tasks to Be Performed by Members of the Knowledge Estimation Panel.) The steps involved in preparing for the task and making the judgments are described below.

Each panelist was required to conceptualize a hypothetical reference group of only those college graduates who are likely to pursue careers as principals in the elementary or secondary schools, excluding persons who are likely to pursue advanced study or non-teaching careers. Next, the panel member was instructed to consider only those graduates who are deemed minimally qualified as licensed principals in Tennessee (i.e., those who have the minimum knowledge and academic skills for competent performance). Because educators are thoroughly experienced in using this concept, they are likely to perform well and conscientiously in defining minimal competence because of the consequences of making incorrect judgments with regard to individuals.

Each panel member was directed to make estimates about knowledge as opposed to correct responses that would include guessing correctly. An exercise was used at the meeting to assist the panelists in forming the appropriate reference group, and making judgments about knowledge levels. In order to prepare for the panel meeting, the panelist was encouraged to obtain information locally about the relevant curriculum and professional preparation program.

Judgments were made on each test question by the panel member using a 9-point numerical response scale (10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, and 90%). The score points were not described verbally for two reasons: (1) to avoid influencing the judgments made and (2) to utilize the familiar and widely-used numerical basis for judging test performance.

Test Item Analysis. Each of the 33 panelists was asked to relate each test item to one or more competencies identified by a task force as necessary for principals in Tennessee schools. ETS personnel prepared the answer sheet (See Appendix D) indicating their choices. Panelists were to indicate either their agreement, by leaving the ETS choice as it was, or their disagreement, by either marking the ETS choice with a slash or by adding their choice by filling in a bubble.

Standards Committee Functions

The Standards Committee was responsible for performing three functions: (1) to decide whether or not the Educational Leadership test was valid for use in the licensure of professional public education personnel in Tennessee; (2) to develop a recommendation on a minimum qualifying score for the test, if declared valid, and if there were enough tests administered to enable norms (mean, standard deviation, and standard error of measurement) to be set; and (3) to establish relationships between test items and competencies required for licensure.

Validity. In order to make a decision on validity, the Standards Committee reviewed data on the appropriateness of the Educational Leadership test for use in Tennessee. Data from the Content Review Panel had been previously analyzed and prepared in tabular form for the committee. These data included the responses on the appropriateness of the test questions, the congruence between the proportion of each test devoted to each topic, and the emphasis on the topic in the professional preparation curriculum. Data from the Job Relevance Panel were also provided to the committee. The analyses of these data indicated the degree to which the knowledge or academic skills represented by the test questions were related to competent performance as a principal in Tennessee.

The Standards Committee reviewed the data from the Content Review Panel and the Job Relevance Panel for the Educational Leadership test. The data for only these two panels were presented because they provided the information required to determine the validity of the test for use in Tennessee. Basing their actions on a review of these data, the committee made decisions on the validity of the test.

Minimum Qualifying Score. The first step in developing a recommendation on a minimum qualifying score was the presentation to the Standards Committee of the data that were derived from the Knowledge Estimation Panel for the Educational Leadership test. These data consisted of estimated scores of persons who, based on the judgments of the panelists, are minimally qualified for licensure as principals in Tennessee.

The committee also received summative data derived from the results of administering the tests to examinees. The database for the ETS test was sufficiently large to provide normative information that included the standard error of measurement (a quantitative measure of test score precision).

Relationships between Items and Competencies. The committee reviewed data on the agreement/disagreement of panelists with decisions of ETS personnel who linked test items with competencies deemed necessary for principals.

Organization of the Panels

In this study, a panel was defined as a group of experts assigned to perform a specific function for the test. Because the panel members made independent judgments on the test, the panels did not actually convene as groups to perform their respective functions.

Since the Educational Leadership test included in the study was designed for a specialized professional area, the number of panelists specified for the Content Review Panel, the Job Relevance Panel, and the Knowledge Estimation Panel was the same across all tests. The desired size of each panel for the Educational Leadership test was 20, equally divided into K-12 personnel and higher education personnel.

Formation of the Panels

The nomination and selection of panelists utilized procedures that gave attention to expert qualifications, representation of gender groups, inclusion of significant racial/ethnic group members, and diversity of higher education institutions and local school districts in Tennessee. The nomination of panel members from higher education institutions was initiated by a letter of request from the State Department of Education, which is included in Appendix E along with instructions for nominating panel members and nomination forms that are traditionally sent to the teacher education units with preparation programs for a specialized area. Personnel from local school districts in Tennessee attending the Tennessee Academy for School Teachers participated in the project.

The instructions for nominating panel members provided background information on the study. The criteria for panel member eligibility stated in the instructions were the following:

(1) currently serving in the public schools in the area for which nominated or currently serving as a faculty member in a college or university offering one or more approved teacher education programs

(2) a minimum of two years of experience as defined above

(3) licensure in the appropriate area for public school nominees

The eligibility of nominees to serve on the panels for which they were nominated was ascertained based on congruence between the stated criteria and the nomination form data. The process of selecting panelists ensured that the factors identified above were addressed to the maximum extent possible. A listing of the study participants who consented to be listed is presented in Appendix F. The letter of notification and other information sent to the panelists are contained in Appendix G.

Preparation for Panel Meetings

In advance of the panel meetings, the panelists were sent preliminary materials related to their tasks (Appendices B-D). The materials for each function (content review, job relevance, and knowledge estimation) included an overview of the task, the instructions for performing the task,

a copy of the appropriate response form, and a description of the test content. For the Content Review Panel members, suggestions were included on preparation that the panelists might make, such as reviewing course descriptions in college catalogs, consulting with subject matter specialists, and discussing course content with colleagues. Many panel members did not have to make such preparation because they were adequately prepared by their own experience.

Knowledge Estimation Panel members participated in an orientation exercise that was designed to provide training in the maintenance of consistent standards when making judgments about questions with different levels of difficulty. Sample questions from ETS tests were presented with two estimated percentages of examinees who would know the correct answer. The actual percentages were used for a national sample of ETS examinees representing the second and fourth quintiles on the total test score distribution. These two quintiles were used to avoid influencing the panelists unduly when they made actual estimates later. Between the presentation on the questions and the percentages, the panelists made estimates of the percentage of examinees in each quintile who would know the correct answer. The panel members also made estimates of the percentage of minimally qualified examinees who would know the correct answer to each sample question.

One edition of the ETS test was used in the study. Because an ETS test is secured, the preparation of the test materials was performed by ETS personnel. Within the test, the items were grouped by content topic in order to facilitate the work of the panelists. The correct answer for each test question was marked on the test reviewed by each panel. The number of test questions reviewed was 145 for the Educational Leadership test.

Data Collection

For the Educational Leadership test, the morning was devoted to a meeting of the Content Review Panel and the Job Relevance Panel; the afternoon, of the Knowledge Estimation Panel. A general orientation was conducted on the background of the study and the tasks to be performed by each panel. After the introductory activities were completed, the panelists completed the assigned tasks.

The data collection was conducted at successive meetings in Knoxville and Nashville, in July, 1992. Personnel from Memphis State University handled matters related to travel by the panelists from the institutions of higher education. ETS personnel who work with their testing programs and have participated previously in similar studies conducted the data collection sessions assisted by staff from Memphis State University. A general orientation was conducted on the background of the study and the tasks to be performed by all participants.

Selection and Meeting of the Standards Committee

A group of 9 educational and lay representatives was enlisted by Memphis State University personnel to serve as the Standards Committee for the study. (See Appendix H for a list of committee members.) In determining the composition of the committee, attention was given to several factors: geographic distribution, representation of males and females, representation of racial/ethnic groups, and representation of higher education institutions, local school districts, and the general public.

The Standards Committee met in Nashville in September, 1992. The committee reviewed data regarding the appropriateness (content review and job relevance) of the Educational Leadership test and made a decision about the validity of the test for use in Tennessee. The committee developed a recommendation on a minimum qualifying score for the test based on a review of the data available on examinee performance. It also made a recommendation about the relationship of the items to competencies. Personnel involved in conducting the study served as staff and resource persons for the committee. Personnel from the Tennessee State Department of Education and the Tennessee State Board of Education were observers.

Data on Panel Responses

Data analyses were performed for the responses by the Content Review, Job Relevance, and Knowledge Estimation Panels. The procedures utilized with each set of data are discussed below.

Content Review. Three aspects of the relationship between the Educational Leadership test and the content of professional education preparation programs in Tennessee were assessed by

personnel from higher education institutions in Tennessee. First, the members of the Content Review Panel from higher education institutions examined each test question to judge whether or not at least 90% of the graduates of the appropriate preparation program would have the opportunity to acquire the knowledge or academic skills to answer the question correctly. The panelist was encouraged to choose a "Yes," "Probably Yes," "Probably No," or "No" response if any basis for judgment existed. The analysis of the response consisted of calculating initially for each question the percentage of "Yes" and "Probably Yes" responses. Then, the data were summarized across all questions by calculating the percentage of questions on the test that received "Yes" and "Probably Yes" responses by more than specified percentages of the panelists. Data are reported for over 50%, over 60%, over 70%, over 80%, and over 90% of the panelists assigned to the test.

Second, the panelists compared the relative emphases placed on the major content topics in the Educational Leadership test to the relative emphases placed on these topics within the related professional preparation program. Disregarding differences of 5% or less, the relative emphasis of each topic in the curriculum was rated the "Same As," "More Than," or "Less Than" the emphasis in the test. The analysis of the responses for the test consisted of computing the Difference in Relative Emphasis (DRE) Index. The number of "More Than" responses was subtracted from the number of "Less Than" responses for each topic and divided by the total number of panelists who rated the topic. This procedure is based on the rationale that a "More Than" judgment represents the same difference as a "Less Than" judgment, thereby offsetting each other. The DRE Index for a test was obtained by weighing the panel judgments about each topic (quantity computed above) by the percentage of test questions on the topic and adding the products without regard to their algebraic signs. The derived DRE Index represents the degree of difference between the topical emphases of the test and the college curriculum based on a scale from 0 (very close similarity) to 100 (very little similarity). The DRE Index that was calculated for the test is presented in the report.

Third, the Content Review Panel members for the Educational Leadership test made comparisons of the similarity between the test as a whole and the appropriate professional

preparation program. The response options for the comparison were "Very Close Parallel," "Some Differences," "Appreciable Differences," and "Little Similarity" between the test and the preparation program. The number of reviewers and the percentage distribution of responses were calculated and presented for the test.

Job Relevance. The assessment of the job relevance of the Educational Leadership test focused on the relationship between the content of the test and the job requirements for newly licensed principals in Tennessee as judged by local school district personnel. The five response options were "Critical," "Important," "Acceptable," "Questionable," and "Not Relevant." The initial step in the analysis for the test was to calculate the frequency and percentage distributions of responses for each question by the panelists. Then, the percentage of respondents who rated each question as relevant (i.e., "Critical," "Important," or "Acceptable") was computed. Finally, the percentages of questions that were judged relevant by more than specified percentages of the panelists were calculated. The percentages of questions are reported for over 50%, over 60%, over 70%, over 80%, and over 90% of the panel members assigned to the test.

Knowledge Estimation. Data analyses were performed for the responses by the Knowledge Estimation Panel for the Educational Leadership test. The knowledge estimation function focused on the percentage of minimally qualified applicants for principal licensure in Tennessee who would know the answer to each question. Specified response choices were 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, and 90%. The analysis was made by calculating the mean percentage for each question based on the percentages chosen by the panelists. (Omissions and "Do Not Know" responses were disregarded.) The mean percentage for each question was adjusted upward by adding the percentage of respondents who would not know the answer but would guess correctly. When divided by 100, the sum of the adjusted mean percentages for all questions on a test was derived to provide an estimated raw score mean for minimally qualified applicants.

Because an ETS test is a normative instrument, a scaled score must be derived from the raw score. A linear equation consisting of two numerical values for the test is used to compute the

scaled score for each test. The scaled score is derived by adding a specified numerical value to the product of the raw score and a conversion factor for the score. The conversion parameters provided by ETS were used to obtain the scaled score mean for the test. For the test, the report presents the adjusted raw score mean and the scaled score mean derived from the data collected in the study.

Test Item Analysis. Relationships between items on the Educational Leadership test and the 15 competencies deemed necessary for principals of schools in Tennessee were established by the participants. Competencies labeled were goals/expectations, research/curriculum, growth/development, decision making, needs assessments, organize/implement, technology, parent involvement, professional development, fiscal responsibility, communicate/motivate, cultural values, legal knowledge, policy/politics, and communication/general public. Inasmuch as ETS personnel had indicated their choice(s) for each item, which were marked on an answer sheet, panelists were asked to leave each filled-in bubble if they agreed with the choice of ETS personnel or mark through the filled-in bubble as an indication of disagreement. If panelists thought that items related to other nonindicated competencies, they were to fill in the bubble in the competency column.

Presentation of Data and Results

In this section, the data are summarized for the personnel involved as are the responses of the panels. The results of the deliberations by the Standards Committee are also presented.

Data on Personnel

Background data on the 1992 panel members are reported in Table 1 for the 33 participants. With respect to gender, there were more males on the Content Review Panel (12) and on the Job Relevance Panel (12); 73% (24) of the Knowledge Estimation Panel were males. Concerning ethnicity, there were more whites than blacks on all panels; on the Knowledge Estimation Panel, the ratio of blacks to whites was 1 to 5.6. Demographic data on the 9 Standards Committee members are also presented in Table 1. With regard to gender, 56% (5) of the committee members were

males; when classified by ethnicity, 67% (6) of the committee members (9) were white and three were black.

Table 1

FREQUENCY AND PERCENTAGE DISTRIBUTIONS OF PANELISTS AND STANDARDS COMMITTEE BY GENDER AND ETHNICITY

	Gender						
	Male		Female		No response		Total
Function	f	%	f	%	f	%	
Panel							
Content Review	12	92	1	8	0	0	13
Job Relevance	12	60	8	40	0	0	20
Knowledge Estimation*	24	73	9	27	0	0	33
Standards Committee	5	56	4	44	0	0	9

	Ethnicity						
	Black		White		Other		Total
Function	f	%	f	%	f	%	
Panel							
Content Review	1	8	12	92	0	0	13
Job Relevance	4	20	16	80	0	0	20
Knowledge Estimation*	5	15	28	85	0	0	33
Standards Committee	3	33	6	67	0	0	90

Table 2 shows the number of 1992 participants in the test validation process from colleges and universities and school districts for the test. A minimum of 20 participants for each panel was sought. Absences and cancellations caused the numbers to be fewer for the colleges and universities; however, each institution with a preparation program for principals was represented. Adequate numbers participated in each category, which allowed the statistical analyses to proceed.

Table 2

NUMBER OF PARTICIPANTS FROM COLLEGES/UNIVERSITIES AND SCHOOL DISTRICTS FOR THE EDUCATIONAL LEADERSHIP TEST

Test	Number of Participants		
	Colleges/ Universities	School Districts	Total Number of Participants
Educational Leadership	13	20	33

Table 3 contains data on the number of participants for panel functions for the test. The total number of participants for the content review function (colleges/university personnel) was 13. The job relevance participants (school district personnel) totaled 20. The knowledge estimation group (both college/university and school district personnel) totaled 33.

Table 3

PANEL FUNCTION PARTICIPANTS FOR THE EDUCATIONAL LEADERSHIP TEST

Test	Panel Function		
	Content Review (N)	Job Relevance (N)	Knowledge Estimation (N)
Educational Leadership	13	20	33

Content Review Panel Results

The Content Review Panel for the Educational Leadership test conducted reviews of the questions and topics of the test. The results of the analyses at each level are reported below.

Content Appropriateness of Multiple-Choice Test Questions. The Content Review Panel members examined each question on the assigned test to judge whether or not 90% of the students completing the appropriate college program would have the opportunity to acquire the knowledge or academic skills to answer the question correctly. After calculating the percentage of "Yes" and "Probably Yes" responses for each question, the percentage of items receiving more than specified percentages of "Yes" responses was computed to obtain a measure of content appropriateness. The results are reported in Table 4.

Table 4

SUMMARY OF VALIDITY DATA ON THE EDUCATIONAL LEADERSHIP TEST

Content - Items*	Percentage of college personnel who rated item content as appropriate for curriculum					
	over 50%	over 60%	over 70%	over 80%	over 90%	N
Percentage of items	95	92	88	81	52	13
Content - Topics	Difference in relative emphasis of curriculum and test topics					N
Index	13.6					13
Content - Total test	Percentage of college personnel choosing each response option as appropriate for curriculum					
	Close parallel	Some differences	Appreciable differences	Little similarity		N
Percentage of items	0	61.5	30.8	7.7		13
Job relevance - Items*	Percentage of public school personnel who rated item content as relevant to job					
	over 50%	over 60%	over 70%	over 80%	over 90%	N
Percentage of items	97	92	85	74	46	20

*Number of items =145

The results for the Educational Leadership test indicated that over 50% of the panelists viewed 95% of the questions as content appropriate. Based on the criterion of more than 70% of the panelists, the percentage of test questions judged content appropriate was 88%. A minimum of 81% of the questions on each test was perceived as content appropriate by over 80% of the panel members.

Relative Emphases of Test Topics and Curricula. The Content Review Panel members assigned to the test compared the major content topics with the topics in the related college curriculum. Allowing a difference of 5% or less, the relative emphases were rated the "Same As," "More Than," or "Less Than." The responses were pooled by topic and weighted by percentage of test questions on the topic. A Difference in Relative Emphasis (DRE) Index was computed for the test. The results are also presented in Table 4. The index range can be from a minimum of 0 (very close similarity) to 100 (very little similarity). The DRE Index for the Educational Leadership test under study was 13.6.

Overall Similarity Between Tests and Curricula. The Content Review Panel members made judgments about the similarity between the test as a whole and the related professional preparation programs. The choices for comparison were "Very Close Parallel," "Some Differences," "Appreciable Differences," and "Little Similarity." The percentages of panelists selecting each option are also depicted in Table 4 for each test reviewed.

Considering close parallel and some difference as indicating relatively high congruence, the percentage for the test was 61.5%. Appreciable differences attained a 30.8% response choice.

Job Relevance Panel Results

The Educational Leadership test was reviewed by a Job Relevance Panel. The panel member reviewed each question and judged its relevance to the responsibilities of newly licensed school principals in Tennessee. Responses of "Critical," "Important," and "Acceptable" were used to identify questions representing relevant knowledge and academic skills. Responses of

"Questionable" and "Not Relevant" were defined as indicating irrelevance. The results of the job relevance ratings for the tests are also presented in Table 4.

The ratings for the test revealed that more than 50% of the panel members considered 97% of the questions on the test to be job relevant. Over 80% of the panelists perceived that 74% of the questions on the test were job relevant.

Knowledge Estimation Panel Results

The members of the Knowledge Estimation Panel for the Educational Leadership test made judgments independently on the percentage of minimally qualified applicants for licensure as principals in Tennessee who would know the answer to each question. Based on the response choices (10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, and 90%) selected, the mean percentage for each question was computed and adjusted upward to account for guessing the correct answer if unknown to the examinee. The sum of the adjusted percentages represented the estimated raw score mean for the test. The raw score mean was converted to a scaled score mean using conversion parameters provided.

Table 5 contains a summary of the analysis on an estimated score for the test. Included are the raw score mean and the scaled score mean. Also included are total items and number of scored items for the test.

Table 5

SUMMARY OF THE ANALYSIS ON AN ESTIMATED SCORE FOR MINIMALLY QUALIFIED LICENSURE CANDIDATES FOR THE EDUCATIONAL LEADERSHIP TEST

Test	Items	Mean		N
	Total/Scored	Raw Score	Scaled Score	
Educational Leadership	145/143	67.837	528.647	33

The scaled scores for each ETS subject-matter test can vary from a low of 250 to a high of 990, a 740-point difference between the lowest and highest scores possible. A score cannot be compared directly with another subject-matter test for two reasons: first, each test is normed

independently on different groups of examinees; second, the standard error of measurement, an index of the precision of test scores, varies to a considerable degree between tests.

Concerning the test item analysis, the number of ETS choices, disagreements with ETS choices, additional competencies recommended by item, and maximum recommendations of a competency are shown in Appendix D.

Standards Committee Actions

The Standards Committee elected one of its members to serve as chair during the deliberations in order to take the formal actions required. The decisions on test validity, the recommendation of a minimum qualifying score, and matters related to the relationships between test items and competencies are reported below.

Test Validity Decision

The Standards Committee was presented all of the data collected and analyzed in performing the content review and job relevance review functions. (Knowledge estimation data were not released to the committee until the test validity decisions had been made.) The committee considered concurrently the content review results (test item, test topic, and total test levels) and job relevance review results for the Educational Leadership test independently in making decisions on test validity. Utilizing this approach, the committee concluded that the Educational Leadership test is valid to use in Tennessee for the licensure of principals.

Recommended Minimum Qualifying Score

The Standards Committee received the results of the knowledge estimation function for minimally qualified professional practitioners based on the judgments of the panel members who reviewed the Educational Leadership test .

The data reported for the test with normative information were the following: items, total and scored; number of examinees; scaled score mean; standard deviation; standard error of measurement; and knowledge estimation scaled score mean. In addition, the values for scaled score means minus 1, 2, 3, and 4 standard errors of measurement were derived (Table 6).

Table 6

NORMATIVE AND DERIVED DATA ON THE EDUCATIONAL LEADERSHIP TEST

Term	Data
Items	
Total/Scored	145/143
Norms	
N	715
Mean	619
S.D.	102
S.E.M.	29
Knowledge Estimation	
Mean	529
Mean -	
1 S.E.M.	500
2 S.E.M.	471
3 S.E.M.	442
4 S.E.M.	413

After a thorough review of the examinee performance data, the committee recommended that the Tennessee State Board of Education adopt a minimum qualifying score of 500 for the Educational Leadership test. The committee further recommended that the score be reviewed in two years in order that Tennessee dat be considered.

Actions Concerning the Relationships of Test Items to Competencies

After examining the data presented them, the committee concluded that there appeared to be some relationships between the items on the Educational Leadership test and the competencies deemed necessary for principal licensure in Tennessee. There were concerns expressed about items that had few references to competencies.

Conclusion

The actions of the Tennessee State Board of Education relating to the recommendations made by the Standards Committee are of interest and significance for personnel from teacher

preparation institutions and principals and others who will take the Educational Leadership test. Its actions represent an opportunity to set licensure score requirements for the test considered in this project in order to reflect curricular offerings of institutions involved in preparing professionals for administrative responsibilities. Establishing a required score reflects higher levels of accomplishment by Tennessee teacher education graduates and a stronger relationship with national norms, but necessitates avoiding an adverse effect on minority candidates.

A concern of professional educators is to conduct periodic reviews of all tests required for licensure in Tennessee to ensure that the most recently-created and revised tests are analyzed from the viewpoints of job relevance in K-12 schools and content correlation with college programs of study. Inasmuch as the contents of the tests are continually modified, changes in test items are made periodically, resulting in new versions of the tests. An on-going program of review will produce new sets of data on which to base recommendations of minimal scores for each new or revised instrument. Any consideration of a change in a minimum score will necessitate an analysis of the test for validity purposes, job relevance considerations, and knowledge estimation reasons.

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APPENDIX A

TEST CONTENT DESCRIPTION

EDUCATIONAL LEADERSHIP: ADMINISTRATION AND SUPERVISION (EAS/41)	Approx. # of items	Appro % of test
I. Examinee demonstrates knowledge of leadership in the following areas of educational instruction: A. Determining needs: Pupil needs, community expectations, national priorities, with knowledge of current research findings B. Curriculum design and instructional improvement: Determination of goals and objectives, instructional methods, techniques and resources, strategies for implementing curriculum decisions, and knowledge of relevant research data C. Development of staff and program development: Assessment of staff abilities, staff development. Evaluation: Strategies for change, types, methods, and procedures	54	37%
II. Examinee demonstrates knowledge of leadership in the following areas of educational administration: Organizational and operational features, business, fiscal and legal matters, governance and control features of school management	48	33%
III. Examinee indicates various individual and group leadership skills: Understanding and effecting change in individuals and groups through effective communication skills; utilization of community resources; creating and maintaining a positive and affective environment	43	30%
	145 items	100%

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APPENDIX B

INSTRUCTIONS AND OVERVIEW OF TASKS TO BE PERFORMED BY MEMBERS OF THE CONTENT REVIEW PANEL

INSTRUCTIONS FOR COMPLETING THE CONTENT REVIEW FORM

Gridding Instructions

- Use only the No. 2 (soft-lead) pencil given to you.
- Make each mark dark and completely fill the circle.
- Do not extend marks outside the circles.
- Use a clean soft eraser. Erase completely any changes you wish to make.
- Make no stray marks on the form.

Panelist Information Section

The items in this section appear at the left of Side One.

- ETS Use Only. Use only as directed by the panel leader.
- Panel Number. Fill in the circles for the two-digit number assigned to your panel.
- Instructional Level. Fill in ONE circle only next to the instructional level at which you teach or provide other educational personnel services.
- ID Number. Fill in the circles for the three-digit number assigned to you as a panelist.
- Sex. Fill in the circle for male or female.
- Name. Please print your name in the space provided.
- Ethnicity. Fill in ONE circle only that best describes your background.
- Data Collection Date. Fill in the circles for the two-digit number for today's month, day and year.

Verify that you have entered all required information.

Question Review Section

One of your tasks is to examine each test question and judge whether or not a student in a teacher education program in Tennessee would have had an opportunity to acquire the knowledge and academic skills to answer the question correctly.

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INSTRUCTIONS FOR COMPLETING THE CONTENT REVIEW FORM

In making your judgment about each test question, consider whether the knowledge or academic skills related to the question would have been covered in any of the courses normally taken by students enrolled in an appropriate training program. In some cases a course that is a prerequisite to entering a training program may have been taken by some students in college or in high school. When such a course is one in which the knowledge or skill related to a particular question is taught, all students who would have taken the course, whether in college or in high school, should be considered to have had an opportunity to acquire that knowledge or skill.

The content of a question should be considered to be "taught" if, in your judgment, at least 90 percent of the students would have had an opportunity to acquire that knowledge or skill through class lectures or discussions, through laboratory assignments, through textbooks or their homework assignments, or through other outside reading. You are not to judge whether the students would, in fact, have learned the answer; you are only to judge whether they would have had an opportunity to acquire the knowledge or academic skills to answer correctly.

There are four response categories:

Y = Yes
P = Probably Yes
Q = Probably No
N = No

As you examine each test question and its answer, judge whether the students in the group with which you are concerned would definitely have had an opportunity to acquire the knowledge or academic skills to answer correctly. If you think they would have, fill in circle "Y" (Yes) on the Content Review Form with a heavy, dark mark so you cannot see the letter in the bubble. If you think that the students would probably have had an opportunity to acquire the knowledge of academic skills, fill in the circle "P" (Probably Yes). Similarly, fill in the ovals "Q" (Probably No) and "N" (No) if you think students would probably not or definitely not have had an opportunity to acquire the knowledge or academic skills to answer correctly.

Before you fill in a circle, please make sure that the number on the form matches the number of the question in the test booklet. If you wish to change a response, erase completely your first choice so that your final judgment will be the only one picked up by the scanning machine.

In making your judgments you are not to be concerned about how many questions you are assigning to each category; your responsibility is to apply your best judgment in evaluating each question individually.

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INSTRUCTIONS FOR COMPLETING THE CONTENT REVIEW FORM

At the panel meeting, you will be receiving a Panelist's Comment Sheet for use as you review test questions. Panelists should note on the Comment Sheet the item number of any test question that they believe requires revision or removal from the test. Though all test questions have undergone extensive editorial and sensitivity review, panelists should note any test questions that appear ambiguous, awkwardly phrased, incorrect in some way, insensitive to a particular group of candidates, or biased in a way that would put a particular group of candidates at a disadvantage. Panelists should provide an explanation of the problem for any test question they identify.

CONTENT REVIEW/KNOWLEDGE ESTIMATION PANEL
OVERVIEW OF TASKS TO BE PERFORMED BY PANEL MEMBERS

The study in which you have been asked to participate is being conducted for the Tennessee Department of Education. You have been selected to serve on the Content Review/Knowledge Estimation Panel. As a member of this panel, you will be asked to perform two tasks, the first in the morning session and the second in the afternoon session. An overview of each task follows.

Content Review Overview

One purpose of the study is to evaluate test content in relation to teacher education programs in Tennessee and to judge whether applicants have had the opportunity to acquire the knowledge or academic skills measured by the test under review. During the morning session you will be asked to:

(1) examine each test question and judge whether a student in teacher education programs in Tennessee would have had an opportunity to acquire the knowledge and academic skills to answer the question correctly.

(2) examine the description of test content used in developing each edition of the test and judge the extent to which the knowledge and academic skills associated with each content category are represented as an appropriate proportion of the test; i.e., whether each curriculum content area is appropriately represented, is underemphasized, or is overemphasized in the test. You will also be asked to identify important areas not represented in the test that could be reliably measured and should be included.

A panel of representative faculty members from throughout the state will be assembled to make their judgments. The judgments, however, will be made individually and independently; members of the same panel will not confer as a group, nor will they be informed of the judgments made by other members. The judgments of all members of a panel will be combined statistically to arrive at a summary judgment about each test question, as well as the test as a whole. Summary results will be published in a final report describing the study and its findings.

Two of the enclosures in this mailing are intended to help you prepare for this first task. If, in studying the materials, you find that you have questions about this task, be sure that they are answered during the orientation session at the meeting. These enclosures are:

(1) Content Review Form (sample). This form is to be used to record your judgments about test questions. Please study the accompanying instructions for completing the form and examine the sample form before you go to the panel meeting site. A Comments Form will be given to you at the panel meeting so you may write down comments about any aspect of the test.

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(2) Test Content Description. This enclosure identifies the major groups of topics covered by the test and indicates the relative emphasis given to each topic. At the meeting, you will be asked to judge whether each content area is represented as an appropriate proportion of the test, is underemphasized, or is overemphasized, and to record your judgment on the Test Content Description Review Form (described below). You will also be asked to identify important areas not represented in the test that could be reliably measured and should be included.

(3) Test Content Description Review Form (sample). You will use this form to your judgments regarding the content of the test. You will be asked to judge whether each content area listed in the Test Content Description is given about the same, more, or less emphasis in your curriculum compared to the emphasis given that area on the test. You will also be asked if there are major content areas not listed in the Test Content Description that should be added to the test.

Knowledge Estimation Overview

The second purpose of the study is to estimate the test performance of minimally knowledgeable candidates for certification as beginning teachers or practitioners in the public schools of Tennessee. Your task will be to make judgments about the difficulty of individual test questions for persons who have the minimum level of knowledge necessary for competent performance as a beginning teacher or practitioner in Tennessee. Your judgments will be combined with judgments made by other panel members to derive an estimate of the probable test performance of this group of persons.

School and college personnel from throughout the state will be assembled to make their judgments. Judgments regarding the difficulty of each test question will be made individually and independently. Once each panel member has rated each of the items in the test, the individual judgments of all members of the panel will be combined statistically to arrive at a summary judgment for a recommended passing score on the test.

Two enclosures in this mailing are intended to help you prepare for the Knowledge Estimation task:

(1) Knowledge Estimation Form. This is a sample of the form that will be used to record your judgments about the test questions. Before going to the meeting site, please study the accompanying instructions for completing the form, examine the enclosed sample form, and identify any questions about the task you would like to have answered during the orientation session.

(2) Examinee Knowledge About Illustrative NTE Test Questions. This enclosure will be used at the panel meeting as part of an exercise to provide you with some experience in making judgments about the knowledge that characterizes defined groups of examinees for items which differ in difficulty.

You have been asked to participate in this study because you are familiar with the knowledge and academic skills needed for competent performance as a beginning teacher in Tennessee. Before attending the panel meeting, however, you may want to draw upon local sources of information and to talk with colleagues.

WHEN YOU COME TO THE MEETING, PLEASE BRING THIS PACKET OF MATERIALS WITH YOU.

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Panel No. _____ Panelist I.D. No. _____

SAMPLE

TEST CONTENT DESCRIPTION

REVIEW FORM

TEST NAME: _____

PART ONE

Some time will be provided at the data collection center for you to complete this form when ETS personnel will be available to answer questions, so please do not record any judgments on this form beforehand.

	Percent of Test*	Emphasis in Curriculum				Percent of Test*	Emphasis in Curriculum		
		Same	More	Less			Same	More	Less
I	___ ___ ___	S	M	L	XI	___ ___ ___	S	M	L
II	___ ___ ___	S	M	L	XII	___ ___ ___	S	M	L
III	___ ___ ___	S	M	L	XIII	___ ___ ___	S	M	L
IV	___ ___ ___	S	M	L	XIV	___ ___ ___	S	M	L
V	___ ___ ___	S	M	L	XV	___ ___ ___	S	M	L
VI	___ ___ ___	S	M	L	XVI	___ ___ ___	S	M	L
VII	___ ___ ___	S	M	L	XVII	___ ___ ___	S	M	L
VIII	___ ___ ___	S	M	L	XVIII	___ ___ ___	S	M	L
IX	___ ___ ___	S	M	L	XIX	___ ___ ___	S	M	L
X	___ ___ ___	S	M	L	XX	___ ___ ___	S	M	L

* Enter the percentages listed on the Test Content Description Form.

The chart above is a standard form that is used to determine to what degree the relative emphasis given each topic in the NTE Programs Tests corresponds to the relative emphasis of that topic within the broad curriculum outline of the teacher education sequence at your institution. The Roman numerals from I to XX above correspond to the Test Content Topics listed in the Test Content Description Form. Before you begin to make the comparisons, please record the percentage figure for each topic as listed on the right hand side of the Test Content Description Form. As you record each percentage figure, be sure that the number of the Content Topic on the two forms is the same. Because the same form is being used for all tests, there may be more Content Topic numbers listed on this form than there are topics in the test which you are reviewing. Please double check to see that the last number you assign a percentage to on this form is the last number on the form.

Once you have filled in the column labeled "Percent of Test", you can begin evaluating the emphasis placed on the topics listed above to the relative emphasis placed on these topics within the broad curriculum of the teacher education sequence at your institution. If you desire, you may consult with colleagues regarding these questions before you answer, but the responses placed on this form should represent your best judgment.

For each topic above, circle the letter next to the topic that indicates your judgment, as follows:

- Circle S if the topic is given about the SAME emphasis in the teacher education curriculum at your institution as in the test. Disregard small percentage differences, i.e., differences of 5% or less.
- Circle M if the topic is given MORE emphasis in your institution's teacher education curriculum than in the test. Circle M only if in your opinion the difference is greater than 5%
- Circle L if the topic is given LESS emphasis in your institution's teacher education curriculum than in the test. Circle L only if in your opinion the difference is greater than 5%.

SAMPLE

PART TWO

(1) Based on the information you have regarding the general content topics covered in this test, select the option below that most closely characterizes your judgment regarding the similarity between this NTE test and the teacher education sequence at your institution. Indicate your answer by placing an X next to the response that you have chosen, then use the space below to add any additional comments you may have.

A ____ The test content topics parallel the teacher education sequences at our insitution very closely.

B ____ There are some differences between the test content topics and the teacher education sequences at our institution, but these differences do not appear to be appreciable.

C ____ There appear to be some appreciable differences between the test content topics and the teacher education sequence at our institution.

D ____ There is little similarity between the test content topics and the teacher education sequence at our institution.

(2) Use the space below to list any major content areas in your institution's teacher education sequence that do not appear to be covered in the Test Content Description. Please note that the topics you write in should be of approximately the level of specificity as those listed. Do not list topics that may be subsumed under one of the categories listed -- if you are uncertain as to whether you should list a topic here, wait until you have examined the packet of test questions (you will receive these at the data collection center) before doing so.

(3) Use the space below to indicate any additional comments you may have.

Panelist's Signature

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APPENDIX C

INSTRUCTIONS AND OVERVIEW OF TASKS TO BE PERFORMED BY MEMBERS OF THE JOB RELEVANCE PANEL

INSTRUCTIONS FOR COMPLETING THE JOB RELEVANCE FORM

Gridding Instructions

- Use only the No. 2 (soft-lead) pencil given to you.
- Make each mark dark and completely fill the circle.
- Do not extend marks outside the circles.
- Use a clean soft eraser. Erase completely any changes you wish to make.
- Make no stray marks on the form.

Panelist Information Section

The items in this section appear at the left of Side One.

- **ETS Use Only.** Do not fill in.
- **Panel Number.** Fill in the circles for the two-digit number assigned to your panel.
- **Instructional Level.** Do not fill in.
- **ID Number.** Fill in the circles for the three-digit number assigned to you as a panelist.
- **Sex.** Fill in the circle for Male or Female.
- **Name.** Please PRINT your name in the space provided.
- **Ethnicity.** Fill in ONE circle only that best describes your background.
- **Data Collection Date.** Fill in the circles for the two-digit number for today's month, day and year.

Verify that you have entered all required information.

Question Review Section

Your task is to make judgments about the extent to which the knowledge and academic skills tested by individual questions in the test under review are relevant to competent performance as a beginning teacher or other specified educational personnel in the schools of Tennessee.

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As you examine each test question and its answer, judge the extent to which the knowledge or academic skill tested in the question is relevant to competent performance of a beginning teacher or other specified educational personnel in the schools in Tennessee. There are five response categories:

C = Crucial
I = Important
A = Acceptable
Q = Questionable
N = Not Relevant

When you have made your judgment, locate the column on the Job Relevance Form with the appropriate heading and fill in the corresponding circle (C, I, A, Q, N) with a heavy, dark mark so you cannot see the letter in the bubble. Before you mark a space, please make sure that the number on the form matches the number of the question in the test booklet. If you wish to change a response, erase completely your first choice so that you final judgment will be the only one picked up by the scanning machine.

In making your judgments you are not to be concerned about how many questions you are assigning to each category; your responsibility is to apply your best judgment in evaluating each question individually.

After you have finished making your judgments about the questions on a page, and again when you have finished the entire test booklet, please look over the questions and your responses to be sure that you are satisfied with your judgments. Also, check that the number of the last question for which you have recorded a judgment on the form corresponds to the number of the last question in the test booklet. Because the same form is being used for all tests, there may be more questions listed on the form that there are in the test booklet with which you are working.

At the panel meeting, you will be receiving a Panelist's Comment Sheet for use as you review test questions. You should note on the Comment Sheet the item number of any test question that you believe requires revision or removal from the test. Though all test questions have undergone extensive editorial and sensitivity review, note any test questions that appear ambiguous, awkwardly phrased, incorrect in some way, insensitive to a particular group of candidates, or biased in a way that would put a particular group of candidates at a disadvantage. Please provide an explanation of the problem for any test question you identify.

JOB RELEVANCE/KNOWLEDGE ESTIMATION PANEL
OVERVIEW OF TASKS TO BE PERFORMED BY PANEL MEMBERS

The study in which you have been asked to participate is being conducted for the Tennessee Department of Education. You have been selected to serve on the Job Relevance/Knowledge Estimation Panel. As a member of this panel, you will perform two tasks, the first in the morning session and the second in the afternoon session. An overview of each task follows.

Job Relevance Overview

The first purpose of the study is to review and evaluate test content in relation to the knowledge and academic skills which are relevant to teaching or practicing in the public schools of Tennessee. The corresponding task of your panel, to be carried out in the morning session, will be to review each test question and to judge the extent to which the knowledge or academic skills needed to answer the question correctly are relevant to competent performance as a beginning teacher or practitioner in Tennessee in the special area covered by the test.

School personnel from throughout the state will be assembled to make their judgments. The judgments, however, will be made individually and independently; members of the same panel will not confer as a group, nor will they be informed of the judgments made by other members. The judgments of all members of a panel will be combined statistically to arrive at a summary judgment for the panel about each test question, as well as for the test as a whole. The summary results will be published in a final report describing the study and its findings.

Two of the enclosures in this mailing are intended to help you prepare for the task pertaining to Job Relevance. If, in studying these materials, you find that you have questions about the task, be sure they are answered during the orientation session at the meeting.

(1) Test Content Description. This enclosure is provided to help you become more familiar with the general content of the test you are to review. The enclosure identifies the major groups of topics covered by the test and indicates the relative emphasis given to each. You will not be asked to make judgments about the topics and their relative emphasis. However, at the panel meeting you will be given a Comments Form you may use to write down comments about any aspect of the test.

(2) Job Relevance Form (sample). You will use this form and the accompanying instructions to record your judgments about the test questions. Please study the instructions for completing the form and examine the enclosed sample form before you go to the panel meeting site.

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Knowledge Estimation Overview

The second purpose of the study is to estimate the test performance of minimally knowledgeable candidates for certification as beginning teachers or practitioners in the public schools of Tennessee. Your task will be to make judgments about the difficulty of individual test questions for persons who have the minimum level of knowledge necessary for competent performance as a beginning teacher or practitioner in Tennessee. Your judgments will be combined with judgments made by other panel members to derive an estimate of the probable test performance of this group of persons.

School and college personnel from throughout the state will be assembled to make their judgments. Judgments regarding the difficulty of each test question will be made individually and independently. Once each panel member has rated each of the items in the test, the individual judgments of all members of the panel will be combined statistically to arrive at a summary judgment for a recommended passing score on the test.

Two enclosures in this mailing are intended to help you prepare for the Knowledge Estimation task:

(1) Knowledge Estimation Form. This is a sample of the form that will be used to record your judgments about the test questions. Before going to the meeting site, please study the accompanying instructions for completing the form, examine the enclosed sample form, and identify any questions about the task you would like to have answered during the orientation session.

(2) Examinee Knowledge About Illustrative NTE Test Questions. This enclosure will be used at the panel meeting as part of an exercise to provide you with some experience in making judgments about the knowledge that characterizes defined groups of examinees for items which differ in difficulty.

You have been asked to participate in this study because you are familiar with the knowledge and academic skills needed for competent performance as a beginning teacher in Tennessee. Before attending the panel meeting, however, you may want to draw upon local sources of information and to talk with colleagues.

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APPENDIX D

INSTRUCTIONS AND OVERVIEW OF TASKS TO BE PERFORMED BY MEMBERS OF THE KNOWLEDGE ESTIMATION PANEL

INSTRUCTIONS FOR COMPLETING THE KNOWLEDGE ESTIMATION FORM

Gridding Instructions

- Use only the No. 2 (soft-lead) pencil given to you.
- Make each mark dark and completely fill the circle.
- Do not extend marks outside the circles.
- Use a clean soft eraser. Erase completely any changes you wish to make.
- Make no stray marks on the form.

Panelist Information Section

The items in this section appear at the left of Side One.

- **ETS Use Only.** Do not fill in.
- **Test Number.** Fill in the circles for the two-digit number to be assigned to your panel.
- **Instructional Level.** Do not fill in.
- **ID Number.** Fill in the circles for the three-digit number assigned to you as a panelist.
- **Sex.** Fill in the circle for Male or Female.
- **Name.** Please PRINT your name in the space provided.
- **Ethnicity.** Fill in ONE circle only that best describes your background.
- **Data Collection Date.** Fill in the circles for the two-digit number for today's month, day and year.

Please verify that you have entered all required information.

Question Review Section

Your task is to make judgments about the difficulty of individual test questions for minimally knowledgeable persons in the field. You will be asked to draw upon your own experience to construct a hypothetical group of persons, each of whom, in your judgment, has the minimum levels of knowledge and academic skills necessary for competent performance as a beginning educator in Tennessee.

As you read each test question and its answer, think of this group of minimally knowledgeable beginning teachers or education personnel. Judge what percentage of the group would be able to identify or to arrive at the answer to the question. In making your estimate, assume that the examinees would not guess blindly if they did not know the answer. You should estimate the percentage who would know the answer without considering the possibility that some additional people might pick the answer purely as a lucky guess.

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When you have made your estimate, locate the column on the Knowledge Estimation Form with the percentage heading (10, 20, 30, 40, 50, 60, 70, 80 or 90) that is closest to your estimate and fill in the corresponding circle on the form with a heavy, dark mark so that you cannot see the letter. Before you fill in a circle, please make sure that the number on the form matches the number of the question in the test booklet. If you wish to change a response, erase your first choice completely so that your final judgment will be the only one picked up by the scanning machine.

Evaluate each test question individually. Do not be concerned about how many questions you are assigning to the various percentage categories.

After you have finished making your estimates about the questions on a page, and again when you have finished the entire test booklet, please look over the questions and your responses to be sure that you are satisfied with your estimates about the difficulty of the test questions. Also, check that the number of the last question for which you have recorded an estimate on the form corresponds to the number of the last question in the question booklet. Because the same form is being used for all tests, there may be more questions listed on the form than there are in the test booklet with which you are working.

OVERVIEW OF TASKS TO BE PERFORMED BY KNOWLEDGE ESTIMATION PANEL MEMBERS

The study in which you have been asked to participate is being conducted for the Tennessee Department of Education. You have been selected to serve on the Knowledge Estimation Panel. An overview of your task follows.

Knowledge Estimation Overview

The purpose of this study is to estimate the test performance of minimally knowledgeable candidates for certification as beginning teachers or practitioners in the public schools of Tennessee. Your task will be to make judgments about the difficulty of individual test questions for such candidates. A "minimally knowledgeable" candidate is one who has the minimum level of knowledge necessary for competent performance as a beginning teacher or practitioner in Tennessee. Your judgments will be combined with judgments made by other panel members to derive an estimate of the probable test performance of this group of persons.

School and college personnel from throughout the state will be assembled to make their judgments. Judgments regarding the difficulty of each test question will be made individually and independently. Once each panel member has rated each of the items in the test, the individual judgments of all members of the panel will be combined statistically to arrive at a summary judgment for a recommended passing score on the test.

Two enclosures in this mailing are intended to help you prepare for the Knowledge Estimation task:

(1) Knowledge Estimation Form. This is a sample of the form that will be used to record your judgments about the test questions. Before going to the meeting site, please study the accompanying instructions for completing the form, examine the enclosed sample form, and identify any questions about the task you would like to have answered during the orientation session.

(2) Examinee Knowledge About Illustrative NTE Test Questions. This enclosure will be used at the panel meeting as part of an exercise to provide you with some experience in making judgments about the knowledge that characterizes defined groups of examinees for items which differ in difficulty.

You have been asked to participate in this study because you are familiar with the knowledge and academic skills needed for competent performance as a beginning teacher in Tennessee. Before attending the panel meeting, however, you may want to draw upon local sources of information and to talk with colleagues.

WHEN YOU COME TO THE MEETING, PLEASE BRING THIS PACKET OF MATERIALS WITH YOU.

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EXAMINEE KNOWLEDGE ABOUT ILLUSTRATIVE NTE TEST QUESTIONS

PRACTICE EXERCISE
(for use at Panel Meeting)

As part of the Knowledge Estimation task, you will be asked to draw upon your experience to construct a hypothetical group of persons, each of whom, in your judgment, has the minimum levels of knowledge and academic skills for competent performance. To help you prepare for this task, you will be asked to participate in an exercise in which you estimate the performance of a national sample of NTE examinees on a series of test questions for which you will be given the answers. The questions are drawn from the Core Battery, the portion of the NTE Programs tests that has been taken previously by most NTE examinees regardless of the fields in which they planned to teach.

For each question in the practice exercise, you will be asked to estimate the percentage of examinees in two categories who knew the answer. These two categories of examinees are defined as follows:

(1) those whose scores, while not the lowest for the total group, were below average (between the 20th and 40th percentiles); and

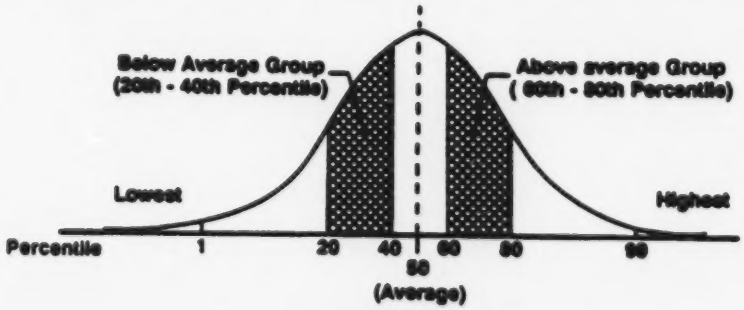
(2) those whose scores were above the average for the total group (between the 60th and 80th percentiles).

You will record your estimates on the form printed on the back of this page. After you have made each estimate, locate the column on the form with the percentage heading (10, 20, 30, 40, 50, 60, 70, 80 or 90) that is closest to your estimate and fill in the corresponding space on the form.

Next, you will be asked to estimate the percentage of minimally knowledgeable candidates for teaching certificates in the state who would know the answer.

After you have completed your estimates, you will be given the "actual" percentages of those who knew the correct answers. (The true figures have been adjusted to account for lucky guesses; the figures you see will be statistical estimates of the percentages who really knew the answers.)

The exercise is not intended to help you formulate your conception of the minimally knowledgeable examinee; rather, it is designed to give you some experience in making judgments about the knowledge demonstrated by defined groups of examinees for questions which differ in difficulty.



Percentile Ranks in a Normal Distribution

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PRACTICE EXERCISE
ANSWER SHEET

Performance of Below Average Test Takers (20th to 40th Percentile)

Your Estimates	Actual Data
1. ⓪①②③④⑤⑥⑦⑧⑨	1. _____
2. ⓪①②③④⑤⑥⑦⑧⑨	2. _____
3. ⓪①②③④⑤⑥⑦⑧⑨	3. _____

Performance of Above Average Test Takers (60th to 80th Percentile)

Your Estimates	Actual Data
1. ⓪①②③④⑤⑥⑦⑧⑨	1. _____
2. ⓪①②③④⑤⑥⑦⑧⑨	2. _____
3. ⓪①②③④⑤⑥⑦⑧⑨	3. _____

Performance of Minimally Knowledgable Test Takers in This State

Your Estimates
1. ⓪①②③④⑤⑥⑦⑧⑨
2. ⓪①②③④⑤⑥⑦⑧⑨
3. ⓪①②③④⑤⑥⑦⑧⑨

SAMPLE QUESTIONS FOR KNOWLEDGE ESTIMATION EXERCISE

1. Teachers who move to different school systems within a state will find that which of the following are most likely to be different?

   (A) Ages during which children must attend school
   (B) Requirements for certification of teachers
   (C) Laws regarding collective bargaining
   (D) Provisions for teacher tenure
   * (E) Grading practices

2. Federal court interpretations of the Constitution suggest that a school can subject a student to long-term suspension or expulsion only if the student

   (A) has participated in an activity that is legally a crime
   (B) is proven to be cognizant of regulations forbidding his or her act
   (C) has participated in an activity that is expressly forbidden by school policy that is available in written form to both students and parents
   (D) has been given a hearing and is judged guilty of the charges by a panel consisting of a school administrator, teachers, and other students
   * (E) is informed of the charges, given the right to a hearing, and told of the right to appeal

(continued on back)

3. The cartoon (above) is making a statement of the public's reaction to

(A) the dropping of the atomic bomb on Hiroshima and Nagasaki
* (B) the activities of Senator Joseph McCarthy in the 1950's
(C) President Kennedy's actions in the Cuban missile crisis
(D) the social programs promoted by President Johnson in the 1960's

REVIEW OF EDUCATIONAL ADMINISTRATION TEST
COMPARED TO NEW TENNESSEE STANDARDS FOR ADMINISTRATORS

Name: _____

Affiliation: _____

Date: _____

Knowledges, Skills, and Abilities

Test Questions	1 Goals/Expectations	2 Research/Curriculum	3 Growth/Development	4 Decision Making	5 Needs Assessment	6 Organize/Implement	7 Technology	8 Parent Involvement	9 Prof. Development	10 Fiscal Respon.	11 Commun./Motivate	12 Cutural Values	13 Legal Knowledge	14 Policy/Politics	15 Commun./Gen. Public
1	(Question 1 is not scored)														
2	●	●	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	●	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	●	0	0	0	0	0	0	●	●	0	0	0
5	0	0	0	0	0	0	0	0	●	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	●	0	0
7	0	0	0	●	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	●	0	0
9	0	0	0	●	●	●	0	0	●	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	●	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	●	0	0	0	0	0
12	●	0	●	0	0	0	0	0	0	0	0	0	0	0	0
13	●	●	0	0	●	0	0	0	0	0	0	0	0	0	●
14	0	●	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	●	0	●	●	0	0	0	0
16	0	0	0	0	●	0	0	0	●	0	0	0	0	0	0
17	0	0	0	0	●	0	0	0	●	0	0	0	0	0	0
18	0	●	0	●	●	●	0	0	0	0	●	0	0	0	0
19	0	●	0	●	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	●	●	0
21	0	0	●	0	0	0	0	0	0	0	0	0	●	●	0
22	0	●	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	●	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	●	0	0	0	●
25	0	0	0	0	0	0	0	0	0	●	0	0	0	0	0
26	●	0	0	●	●	●	0	0	0	0	●	0	0	0	0
27	0	0	●	0	0	0	0	0	0	0	0	0	●	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	●	0	0
29	0	0	0	0	0	0	0	0	●	0	0	0	0	0	0
30	0	0	0	●	0	●	0	0	0	●	0	0	0	0	0

Knowledges, Skills, and Abilities

	1 Goals/Expectations	2 Research/Curriculum	3 Growth/Development	4 Decision Making	5 Needs Assessment	6 Organize/Implement	7 Technology	8 Parent Involvement	9 Prof. Development	10 Fiscal Respon.	11 Commun./Motivate	12 Cutural Values	13 Legal Knowledge	14 Policy/Politics	15 Commun./Gen. Public
31	●	0	0	0	0	0	0	0	●	0	●	●	0	0	●
32	0	0	0	0	0	0	●	0	0	0	0	0	0	0	0
33	●	0	0	0	●	●	0	0	●	0	●	0	0	0	0
34	0	0	0	0	0	●	0	0	0	●	0	0	0	0	0
35	0	●	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	●	●	●	0	0	0	0	●	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	●	0
38	●	0	0	0	●	0	0	0	●	0	0	0	0	0	0
39	0	0	0	●	0	●	0	0	●	0	0	0	0	0	0
40	0	0	0	●	0	0	0	0	0	●	●	0	0	0	0
41	0	0	0	0	●	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	●	0	0	●	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	●	0
44	0	0	0	0	0	0	0	0	●	0	0	0	0	0	0
45	0	0	0	●	0	0	0	0	0	●	●	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0	0	0	0	●	0
47	0	0	0	0	0	0	0	0	●	0	●	0	0	●	0
48	0	0	0	0	0	0	0	0	0	0	0	●	●	0	0
49	0	0	0	0	0	●	0	0	0	0	0	0	●	●	0
50	0	0	0	0	0	0	0	0	0	0	●	0	0	0	●
51	0	0	0	0	0	0	0	0	0	0	●	0	0	0	●
52	0	0	0	●	0	0	0	0	0	0	●	0	0	0	0
53	0	0	0	0	0	0	0	0	0	●	●	0	0	0	●
54	0	0	0	0	0	●	0	0	0	0	●	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	●	0	0	0	0
56	0	0	0	●	0	0	0	0	0	0	0	0	0	0	0
57	0	0	0	0	0	0	0	0	●	0	●	0	0	0	0
58	0	0	0	0	●	0	0	0	0	0	0	0	0	0	0
59	0	●	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	●	●	0	0	0
61	0	0	0	0	0	0	0	0	0	0	0	0	●	0	0
62	(Question 62 is not scored)														
63	0	0	0	0	●	0	0	0	●	0	0	0	0	0	0
64	0	0	0	0	0	0	0	0	0	0	0	0	●	●	0
65	0	0	0	0	0	0	0	0	0	0	0	0	●	●	0

Knowledges, Skills, and Abilities

	1 Goals/Expectations	2 Research/Curriculum	3 Growth/Development	4 Decision Making	5 Needs Assessment	6 Organize/Implement	7 Technology	8 Parent Involvement	9 Prof. Development	10 Fiscal Respon.	11 Commun./Motivate	12 Cutural Values	13 Legal Knowledge	14 Policy/Politics	15 Commun./Gen. Public
66	0	0	0	0	0	0	0	0	0	0	0	0	0		0
67	0	0	0	0	0	0	0	0	0	0	●	0	0		0
68	0	0	0	0	0	0	0	0	0	0	●	●	●	●	0
69	0	0	0	0	0	0	0	0	0	0	0	0	●	●	0
70	0	0	0	0	0	0	0	0	0	0	0	●	0	0	0
71	0	0	0	●	●	●	0	0	0	●	0	0	0	0	●
72	0	0	0	0	0	0	0	0	0	0	●	0	0	0	0
73	●	0	●	0	0	0	0	●	0	0	●	0	0	0	0
74	0	●	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	●	0	0	0	0	0	0	0	0	0	0	0
76	0	0	0	0	●	0	0	0	0	0	0	0	0	0	0
77	0	0	0	0	●	0	0	0	0	0	0	0	0	0	●
78	0	0	0	●	●	0	0	0	0	0	●	0	0	0	0
79	0	0	0	0	0	●	0	0	0	0	0	0	0	0	0
80	0	0	0	●	●	0	0	0	0	0	0	0	0	0	0
81	0	0	0	0	0	0	0	0	0	●	0	0	0	0	0
82	0	0	0	0	0	0	●	0	0	0	0	0	0	0	0
83	0	●	0	0	0	0	0	0	0	0	0	0	0	0	0
84	●	0	0	●	●	●	0	0	0	●	●	0	0	0	0
85	●	0	●	0	0	0	0	0	0	0	0	0	0	0	0
86	0	0	0	●	0	0	0	0	0	0	●	0	0	0	0
87	0	0	0	0	0	0	0	0	0	0	0	0	●	●	0
88	0	0	0	0	0	0	0	0	0	0	●	●	●	●	●
89	0	0	0	0	0	●	0	0	0	0	0	0	0	0	0
90	0	0	0	●	0	0	0	0	0	0	0	0	0	0	0
91	0	0	0	0	0	●	0	0	0	●	0	0	0	0	0
92	0	0	0	●	●	0	0	0	0	0	●	0	0	0	●
93	●	0	0	0	●	0	0	0	●	0	●	0	0	0	0
94	0	0	0	●	0	0	0	0	0	0	0	0	0	0	0
95	●	0	0	0	0	●	0	0	0	0	●	0	0	0	0
96	0	●	0	0	0	●	0	0	●	0	0	0	0	0	0
97	0	0	0	0	●	0	0	0	●	0	●	0	0	0	0
98	0	0	0	●	0	●	0	0	0	0	0	0	0	0	0
99	0	0	0	0	●	●	0	0	●	0	0	0	0	0	0
100	0	0	0	0	0	●	0	0	0	0	●	0	0	0	0

Knowledges, Skills, and Abilities

	1 Goals/Expectations	2 Research/Curriculum	3 Growth/Development	4 Decision Making	5 Needs Assessment	6 Organize/Implement	7 Technology	8 Parent Involvement	9 Prof. Development	10 Fiscal Respon.	11 Commun./Motivate	12 Cutural Values	13 Legal Knowledge	14 Policy/Politics	15 Commun./Gen. Public
101	0	●	0	0	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0	0	0	●	0
103	0	0	0	0	0	0	0	0	0	0	●	0	0	0	0
104	0	0	0	0	●	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
106	●	0	0	0	●	●	0	0	0	0	0	●	●	0	0
107	0	0	●	0	0	0	0	0	0	0	●	0	●	0	0
108	0	0	0	0	0	0	0	0	0	0	0	●	0	0	●
109	0	0	0	0	0	0	0	0	0	0	●	●	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	●	0	0
111	0	0	0	0	0	●	0	0	0	0	0	0	0	0	0
112	0	0	0	0	0	0	0	0	●	0	0	0	0	0	0
113	0	0	0	0	0	0	0	0	0	0	●	0	0	0	0
114	0	0	0	0	0	●	0	0	0	0	0	0	0	0	0
115	0	●	0	0	0	0	0	0	0	0	0	0	0	0	0
116	0	0	0	●	0	0	0	0	0	0	●	0	0	0	0
117	0	●	0	0	0	0	0	0	0	0	0	0	0	0	0
118	0	0	0	0	0	0	0	0	0	0	0	0	●	0	0
119	0	0	0	0	0	●	0	0	0	0	●	0	0	0	0
120	0	0	0	0	0	●	0	0	0	0	●	0	0	0	0
121	0	0	0	0	0	0	0	0	0	0	●	0	0	0	●
122	0	0	0	0	0	0	0	0	0	●	0	0	0	0	0
123	0	0	0	0	0	●	0	0	0	0	0	0	0	0	0
124	0	0	0	0	0	0	0	0	0	●	0	0	0	0	0
125	0	0	0	●	0	0	0	0	0	0	0	0	0	0	0
126	0	0	0	0	0	0	0	0	0	0	0	0	●	0	0
127	0	●	0	0	0	0	0	0	0	0	0	0	0	0	0
128	0	0	0	0	0	●	0	0	0	0	0	0	0	0	0
129	0	0	0	0	0	0	0	0	0	0	●	0	0	0	●
130	0	0	0	0	0	●	0	0	0	0	0	0	●	●	0
131	0	0	0	0	0	0	0	0	0	●	0	0	0	0	0
132	0	0	●	0	0	0	0	0	0	0	0	0	●	0	0
133	0	0	●	0	0	0	0	0	0	0	0	0	0	0	0
134	●	0	0	●	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	●	0	0	0	●	0	0	0	0	0

Knowledges, Skills, and Abilities

	Goals/Expectations 1	Research/Curriculum 2	Growth/Development 3	Decision Making 4	Needs Assessment 5	Organize/Implement 6	Technology 7	Parent Involvement 8	Prof. Development 9	Fiscal Respon. 10	Commun./Motivate 11	Cutural Values 12	Legal Knowledge 13	Policy/Politics 14	Commun./Gen. Public 15
136	0	●	0	0	0	0	0	0	0	0	0	0	0	0	0
137	0	0	0	●	0	0	0	0	0	●	0	0	0	0	0
138	0	0	●	0	0	0	0	0	0	0	●	0	0	0	0
139	0	0	0	0	0	0	0	0	0	0	0	0	0	●	0
140	0	0	0	0	0	0	0	●	0	0	0	0	0	0	0
141	0	0	0	0	0	●	0	0	0	0	0	●	0	0	0
142	0	●	0	0	0	0	0	0	0	0	0	0	0	0	0
143	0	0	0	0	0	0	0	0	0	0	0	0	●	0	0
144	0	0	0	0	0	0	0	0	0	0	0	●	0	0	0
145	0	0	0	0	●	0	0	0	0	0	0	0	0	0	0

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NUMBER OF ETS CHOICES, DIAGREEMENTS WITH ETS CHOICES, ADDITIONAL COMPETENCIES RECOMMENDED BY ITEM, AND MAXIMUM RECOMMENDATIONS OF A COMPETENCY

Item	Number of ETS Choices	Disagreement with ETS Choices	Additional Competencies Recommended	Maximum Recommendations of a Competency (at least 7)
1 not scored	0	0	0	
2	2	2	4	
3	1	0	7	
4	3	1	5	
5	1	1	6	
6	1	0	3	7
7	1	1	6	
8	1	0	3	
9	4	3	3	
10	1	1	9	
11	1	1	4	
12	2	0	4	
13	4	2	1	
14	1	0	6	
15	3	1	4	7
16	2	0	4	
17	2	2	5	
18	5	2	3	
19	2	0	8	
20	2	0	2	
21	3	2	2	
22	1	0	3	
23	1	0	5	
24	2	0	1	
25	1	0	5	
26	5	2	1	
27	2	1	5	
28	1	0	3	
29	1	1	5	
30	3	2	4	
31	4	2	0	
32	1	1	8	
33	5	3	5	
34	2	2	4	
35	1	0	3	8
36	4	1	4	
37	1	0	4	
38	3	3	4	
39	3	2	4	
40	3	1	8	
41	1	1	7	
42	2	0	4	

43	1	1	3	
44	1	1	6	
45	3	2	4	
46	1	1	5	
47	3	2	2	
48	2	1	2	
49	3	1	2	
50	2	0	2	
51	2	2	1	
52	2	1	7	
53	3	1	5	
54	2	0	6	
55	1	0	7	7
56	1	1	6	7
57	2	0	4	
58	1	0	4	
59	1	0	2	
60	2	1	4	14
61	1	0	3	
62 not scored	0	0	0	
63	2	1	6	
64	2	0	1	
65	2	1	0	
66	1	0	1	9
67	1	0	2	
68	4	2	2	
69	2	0	0	
70	1	0	4	
71	5	3	4	
72	1	1	7	
73	4	2	5	
74	1	0	2	
75	1	0	6	
76	1	0	3	
77	2	1	3	
78	3	0	4	
79	1	0	3	
80	2	1	1	
81	1	1	6	9
82	1	0	0	
83	1	0	5	
84	6	1	6	
85	2	0	6	
86	2	0	2	9
87	2	0	2	
88	5	2	1	
89	1	1	7	
90	1	1	3	
91	2	1	3	
92	4	1	4	
93	4	0	1	
94	1	1	3	9
95	3	0	4	
96	3	2	1	

97	3	1	5	
98	2	2	5	
99	3	0	4	
100	2	1	2	
101	1	0	7	
102	1	0	4	13
103	1	0	4	
104	1	0	6	
105	0	0	5	7, 25
106	5	2	2	
107	3	0	3	
108	2	0	1	
109	2	1	4	8
110	1	1	6	
111	1	1	4	
112	1	1	4	
113	1	1	2	
114	1	0	4	
115	1	0	2	
116	2	1	4	
117	1	0	6	
118	1	0	2	
119	2	1	4	
120	2	0	2	7
121	2	2	1	
122	1	1	3	
123	1	1	3	
124	1	1	4	
125	1	0	4	
126	1	0	2	
127	1	0	2	
128	1	1	4	
129	2	0	2	
130	3	2	2	
131	1	1	5	8
132	2	1	2	
133	1	1	2	
134	2	1	4	
135	2	1	2	
136	1	1	3	
137	2	1	4	8
138	2	0	5	
139	1	0	2	7
140	1	1	5	
141	2	2	3	
142	1	0	3	
143	1	1	2	
144	1	1	3	
145	1	1	3	8

APPENDIX E

MATERIALS FOR NOMINATING PANEL MEMBERS

INFORMATION FOR PANEL MEMBER NOMINATION

TENNESSEE TEST VALIDATION PROJECT

for

Institutions of Higher Education

and

School Districts

Bureau of Educational Research Service
College of Education
Memphis State University
Memphis, TN 38152
(901)678-2362

I. The Test

The Educational Leadership test has been selected for complete validation for possible use in Tennessee.

A. The test is an NTE test. Several NTE Specialty Area Tests are currently used for initial teacher licensure in Tennessee. These tests have been produced by Educational Testing Service, Princeton, New Jersey.
B. This Educational Leadership test measures understanding of the content and methods applicable to the particular specialized area. The test is applicable for persons who typically are completing programs with a specialization in the principalship.

II. The Validation Study

To carry out the validation study, public school and college personnel will be asked to serve on the Knowledge Estimation Panel, Job Relevance Panel, and Content Review Panel.

A. The Knowledge Estimation Panel will provide estimates of the percentages of minimally-knowledgeable candidates who would be expected to know the answers to individual test questions. The information provided by the panel will be used to develop a statistical estimate of the score that a typical minimally-knowledgeable candidate might be expected to achieve on each of the tests undergoing validation.
B. The Job Relevance Panel will make judgments about the relationship between test item content and responsibilities of first-year practitioners.
C. The Content Review Panel will judge whether or not at least 90% of the graduates in a given field would have the opportunity to acquire the knowledge or skills to answer an item correctly.

Orientation, support services, and materials will be provided by Educational Testing Service staff. Memphis State University personnel will be in charge of the enlistment of panelists.

The analysis of all the data will culminate in a report to the Tennessee State Department of Education. Information gained from the work of the panel will be used to establish minimum scores on the tests for initial licensure and endorsement.

III. Criteria for Panel Member Eligibility

Criteria used in selecting panel members will include the following:

A. Currently serving in the public schools in the area for which they are being recommended or currently serving as a faculty member in a college or university offering one or more approved teacher education programs.
B. A minimum of two years of experience as defined in A above.
C. Tennessee licensure for public school nominees.

IV. Composition of a Panel

The panels will be composed of both public school and college personnel.

A. Number. Approximately equal numbers of public school principals and college faculty members will participate in the validation study.

B. Geographic Representation of School Personnel. The geographic distribution of the public school personnel will provide roughly proportional representation across the eastern, middle, and western parts of the state.

C. Representation of Higher Education Institutions. The distribution of personnel from teacher education institutions will represent the various types of institutions and will take into account the productivity of approved programs.

D. Other Factors. In the selection of panel members from the nominees, attention will be given to racial/ethnic groups.

V. Time Schedule for the Validation Study

Our selection of the panel members must be completed as soon as possible. Notification of appointment, acceptance by the nominee, and distribution of preliminary materials will be accomplished as nominations arrive. Individuals nominated will attend a full-day meeting in either Knoxville or Nashville in July, 1992 at 8:30 a.m. and lasting no later than 4:00 p.m.

VI. Other Pertinent Information

A. With few exceptions possibly due to special circumstances, the number of nominees from any local school district or higher education institution who will be selected to serve on the panels is expected to be almost all of the nominations submitted.

B. Each panel member will be asked to serve one day.

C. Financial support for both travel, lodging, and meals will be provided by the validation study contractor - Bureau of Educational Research Service, Memphis State University. State of Tennessee rules concerning travel will be applicable.

D. Honoraria cannot be provided. However, if the employing school district of a public school staff member requires that funds be provided to pay for a substitute, appropriate arrangements can be made by the contractor's staff.

Contractor contact person:

John R. Petry
Bureau of Educational Research Service
College of Education
Memphis State University
Memphis, TN 38152
(901)678-2362
FAX 901-678-4206

Bureau of Educational Research Service
302 Ball Education Building, Memphis State University
Memphis, TN 38152

FORM TO SUBMIT A NOMINATION FOR APPOINTMENT TO PANELS
FOR THE TENNESSEE TEST VALIDATION STUDY

1. NAME: _____
2. TELEPHONE NUMBERS: Home (__)_____; Business (__)_____
3. ADDRESSES:

BUSINESS	School/District	_____
	Number, Street	_____
	City, State, Zip	_____
HOME	Number, Street	_____
	City, State, Zip	_____

4. RELEVANT EXPERIENCE (PRESENT POSITION FIRST):

EMPLOYER	POSITION (STATE JOB TITLE)	DATES

5. OTHER DEMOGRAPHIC DATA (ANSWER ALL THAT APPLY):
   A. _____MALE ____FEMALE
   B. (Optional) ____WHITE ____BLACK ____HISPANIC
      ____AMERICAN INDIAN ____OTHER (Specify) _____
   C. AGE: __25 or less __26-30 __31-35 __36-40
      __41-45 __46-50 __51-55 __56 or more
   D. EDUCATIONAL BACKGROUND:

DEGREE	YEAR	INSTITUTION	MAJOR

   E. Certification (check one or more):
      __General Science (014)
      __History (021)
      __Government (023)
      __School Social Worker (107)
      __Visually Impaired (108)

NAME OF SCHOOL DISTRICT NOMINATING _____

SIGNATURE/TITLE_____

ADDRESS_____
No./Street City State Zip

Bureau of Educational Research Service
302 Ball Education Building, Memphis State University
Memphis, TN 38152

IHE FORM

_____

_____

FORM TO SUBMIT A NOMINATION FOR APPOINTMENT TO PANELS
FOR THE TENNESSEE TEST VALIDATION STUDY

1. NAME: _____
2. TELEPHONE NUMBERS: Home (__)_____; Business (__)_____
3. ADDRESSES:

BUSINESS	School/District	_____
	Number, Street	_____
	City, State, Zip	_____
HOME	Number, Street	_____
	City, State, Zip	_____

4. RELEVANT EXPERIENCE (PRESENT POSITION FIRST):

EMPLOYER	POSITION (IF TEACHER, STATE SUBJECT(S))	DATES

5. OTHER DEMOGRAPHIC DATA (CHECK ALL THAT APPLY):
   A. _____MALE _____FEMALE
   B. (Optional) _____WHITE ____BLACK ____HISPANIC
      _____AMERICAN INDIAN ____OTHER (Specify) _____
   C. AGE: __25 or less __26-30 __31-35 __36-40
      __41-45 __46-50 __51-55 __56 or more
   D. EDUCATIONAL BACKGROUND:

DEGREE	YEAR	INSTITUTION	MAJOR

NAME OF INSTITUTION NOMINATING _____

SIGNATURE/TITLE _____

ADDRESS _____
No./Street City State Zip

NOMINATIONS RESPONSIBILITY FORM

_____

_____

It is most important that you let us know who will be responsible for the nomination of panelists. Please provide us the information requested on this form and return it with your nominations by return mail.

Full Name _____

Title/Position _____

Business Telephone Number _____

Full Name _____

Title/Position _____

Business Telephone Number _____

Full Name _____

Title/Position _____

Business Telephone Number _____

Full Name _____

Title/Position _____

Business Telephone Number _____

Submitted by: _____

_____

Institution/School District

TENNESSEE
STATE DEPARTMENT OF EDUCATION
OFFICE OF COMMISSIONER
NASHVILLE, TENNESSEE 37243-0375

May 29, 1992

Dr. Nathan L. Essex, Dean
College of Education
Memphis State University
215 Education Building
Memphis, Tennessee 38152

Dear Dr. Essex:

In implementing the State Board of Education's Policy for the Principal in Tennessee's Schools and respective Licensure Standards, we will be working with Memphis State University and Educational Testing Services regarding validation of the National Teacher's Examination Specialty Area Test for Administrators (NTE Educational Leadership: Administration and Supervision Test).

We must begin the validation process now to meet the Policy's effective date of July 1, 1994, which will require individuals employed for the first time as a principal to meet the test requirements as specified. We have an opportunity for higher education to have input into the validation of the Principal's Test.

I invite you to send a representative from your Department of Educational Administration to attend a meeting scheduled for either July 16 or July 23. These meetings are being held in conjunction with a previously scheduled Tennessee Academy for School Leaders session with principals from across the State for the purpose of validating this test. Choose only one meeting as they are repetitive in content and process.

The July 16th meeting will be held in Knoxville, Room C of the State Office Building located behind the World's Fair Holiday Inn on Henley Street. The July 23rd meeting will be held in Nashville in the Cordell Hull Building, Room C1-124. Both days are scheduled from 8:00 a.m. until the task is completed.

If you wish to send a representative to this data collection session for validation, please call Wendy Siebert at (615) 741-6058 as soon as possible. Ms. Siebert will be able to provide you other particulars regarding directions and lodging choices if needed.

Do not hesitate to call me at (615) 741-1441 if you have any questions regarding this process or policy. Thank you for your interest and participation as we move toward implementing the Administrator Policy.

Sincerely,

Dr. Connie J. Smith
Director
Division of Teacher Education and Accreditation

CJS:wrs

cc: Dr. Tom Valesky, Chair
Dr. Nebraska Mays, Deputy Commissioner
Dr. Harry Bowman, Memphis State University
Mr. J.T. Stewart, Educational Testing Services
Ms. Deborah Gilliam, Director, Research and Development
Dr. Susan Hudson, Director, Teacher Licensing and Career Ladder Certification
Ms. Betty Long, Director of Planning and Special Programs
Dr. Elaine Willers, Director, Tennessee Academy for School Leaders

APPENDIX F

LIST OF PERSONS CONSENTING TO BE LISTED AS PANELISTS IN THE VALIDATION STUDY

PANEL MEMBERS CONSENTING TO BE LISTED AS PARTICIPANTS IN THE VALIDATION STUDY

1.	Hugh D. Adams	Marshall County Schools
2.	Fred Bedelle, Jr.	Lincoln Memorial University
3.	David Benny	Maryville City Schools
4.	Charles W. Burkett	East Tennessee State University
5.	Rosella Carruth	Polk County Schools
6.	Eloise Dabney Cheatham	Maury County Schools
7.	Bernard Childress	Maury County Schools
8.	Linda Coffey	Scott County Schools
9.	Mary Jane Connelly	University of Tennessee, Knoxville
10.	Joe Dent	Knox County Schools
11.	Roy D. Dukes	Marshall County Schools
12.	David F. Green	Polk County Schools
13.	Mary Anne Halt	Chattanooga City Schools
14.	Danny N. Hanson	Marshall County Schools
15.	David Heath	Weakley County Schools
16.	Ray W. Hogan	Metro Davidson County Schools
17.	Sheryl Kerley	Knox County Schools
18.	Don Lambert	Austin Peay State University
19.	Sam Lucas	Memphis State University
20.	Bob McElrath	East Tennessee State University
21.	Sam Miles	Trenton City Schools
22.	Joe Moses	Trevecca College
23.	Alfred L. Motlow, Sr.	Memphis City Schools
24.	Joseph Murphy	Vanderbilt University
25.	Carl Seale	University of Tennessee, Martin
26.	Vivian L. Sims	Giles County Schools
28.	Mary R. Walker	Hamilton County Schools
29.	Colbert W. Whitaker	University of Tennessee, Chattanooga
30.	Vivian Woods	Hamilton County Schools
31.	Gary W. York	Williamson County Schools

APPENDIX G

LETTER OF NOTIFICATION AND SELECTED MATERIALS SENT TO AND/OR RECEIVED FROM PANEL MEMBERS

July 8, 1992

Thank you for participating in the Test Validation study conducted by personnel from Memphis State University and Educational Testing Service, Atlanta for the Tennessee State Department of Education.

Attached is a sheet stating where your group will meet and giving particulars about how your expenses will be taken care of. You will receive from TSDE some information concerning the Content Review task and the Knowledge Estimation task that will prepare you for what to expect. Please bring the package with you.

You will also be sent another set of materials concerning a third task that you will be asked to complete, which relates to the list of 15 knowledges, skills, and abilities deemed necessary for licensure standards for administrators.

If you have need of additional information, call me at 901-678-3407.

Sincerely,

John R. Petry
Research Associate
Bureau of Educational Research Service
Memphis State University

Enclosures:
Panel Member Information Sheet
Leadership Meeting Attendees

FORM A

PANEL MEMBER REPLY FORM
TENNESSEE VALIDITY STUDY OF THE EDUCATIONAL LEADERSHIP TEST

Check the appropriate box to indicate whether or not you can serve as a panel member. Complete the form to provide the information requested.

☐ I, _____, will participate in the
(Print your name)

Tennessee Validity Study of the Educational Leadership Test.

Date of Meeting: City:

☐ I will not be able to participate in the study.

Signature: _____

Employer: _____

Title or
academic rank: _____

Test assigned: _____
(See Panel Member Information Form)

Estimated round trip mileage from your location to the test validation site:

Would you please complete this form and mail it in the enclosed postage-paid envelope AS SOON AS POSSIBLE. We need to receive your reply by return mail. Thank you.

FORM B

NTE DISCLOSURE POLICY AND RELEASE FORM

I understand the importance of protecting the security of the NTE Educational Leadership test. I accept responsibility for the proper safeguarding of these confidential tests and agree to the following conditions:

1. The copy of the test will remain in full view of the ETS representative during the entire inspection period.

2. My copy of the test will be returned to the ETS agent each time I leave the meeting room, and at the end of the inspection period.

3. Neither I nor any member of my family will take an NTE test for a period of one year following the inspection without requesting permission from ETS in writing at least six weeks prior to a scheduled test date.

4. I will not take notes, or otherwise record, copy, or disclose items or responses during or after the inspection.

5. If for any reason the ETS representative must leave the meeting room, all test copies will be gathered and returned to the ETS agent.

Signed _____

Institution _____

APPENDIX H

LIST OF MEMBERS OF THE STANDARDS COMMITTEE

MEMBERS OF THE STANDARDS COMMITTEE
TEST VALIDATION STUDY, SEPTEMBER, 1992

Joe Cornelius, Associate Professor, Educational Administration, Tennessee State University, Nashville

Pat Gammon, Mid-Cumberland Region Director, Tennessee PTA, Hendersonville

Tom George, Professor, Associate Dean, College of Education, The University of Tennessee, Knoxville

Beverly Hearne, French Teacher, Central-Merry High School, Jackson-Madison County Schools, Jackson

Charles Jenkins, President-Elect, School Board Association, Pulaski

B. J. Naylor, Vice-President for Academic Affairs, Freed-Hardeman University, Henderson

Relzie Payton, Instructional Supervisor--Middle Schools, Shelby County Schools, Memphis

Dan Russell, Director of Human Resources, Johnson City Schools, Johnson City

Bettye Triplett, Consultant, Special Projects, Metro Public Schools, Nashville

LIST OF ATTENDEES
STANDARDS COMMITTEE MEETING
Nashville, Tennessee
September 17, 1992

Panel Members

Joe Cornelius, Associate Professor, Educational Administration, Tennessee State University, Nashville

Pat Gammon, Mid-Cumberland Region Director, Tennessee PTA, Hendersonville

Tom George, Professor, Associate Dean, College of Education, The University of Tennessee, Knoxville

Beverly Hearne, French Teacher, Central-Merry High School, Jackson-Madison County Schools, Jackson

Charles Jenkins, President-Elect, School Board Association, Pulaski

B. J. Naylor, Vice-President for Academic Affairs, Freed-Hardeman University, Henderson

Relzie Payton, Instructional Supervisor--Middle Schools, Shelby County Schools, Memphis

Dan Russell, Director of Human Resources, Johnson City Schools, Johnson City

Bettye Triplett, Consultant, Special Projects, Metro Public Schools, Nashville

Observers

Deborah Gilliam, Tennessee Department of Education

Betty Long, Tennessee Department of Education

Susan Hudson, State Board of Education

Nancy Simpkins, State Board of Education

Elaine Willers, Tennessee Department of Education

John R. Petry, MSU College of Education Staff

Tom Snider-Lotz, Educational Testing Service Representative